



## SEQUENCE LISTING

<110> ROTH, RICHARD B.  
NELSON, MATTHEW ROBERTS  
BRAUN, ANDREAS  
KAMMERER, STEFAN M.  
DENISSENKO, MIKHAIL F.  
RENELAND, RIKARD  
ATIENZA, JOSEPHINE M.

<120> METHODS FOR IDENTIFYING RISK OF BREAST CANCER AND TREATMENTS THEREOF

<130> SEQ-4068-UT

<140> US 10/723,518  
<141> 2003-11-25

<150> US 60/429,136  
<151> 2002-11-25

<150> US 60/490,234  
<151> 2003-07-24

<150> US 60/504,258  
<151> 2003-09-18

<160> 235

<170> PatentIn version 3.2

<210> 1  
<211> 83405  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (18828)..(18833)  
<223> this region may or may not be present

<400> 1	60
aaccatcacc catactgtcc cttaaacca gaactctgct tgccactctc cttcstaac	60
tcttggcat cttcaaggc tcagtatttgc acttcgtc cagaaatgtt tcctgactcc	120
ccaatccgag tccctaatac ctgctgcata gccaatccg gcatctataa aattgtttca	180
attgcattct tattcatctg tgtctcctaa gacactgtga tagggcagga atggtgtctt	240
ggatatact gatctccagt cccagtcaat aaattggatt tctgatttaa gtctcctatg	300
atctggatac tccaagttgg agcattcaga gcaaagaatc tgcttggagt ttccttagcc	360
aattggtaa gccccaggct ggtgcagtgg ctcacgcctg taatctcagc actttgggct	420
gctgagatgg gagatttgct tgagcccagg aagttgaggc tacagtgagc catgattgca	480

ccactgcgct atagcctgga tgacagagtg agaccctgtc tgaaggaaaa aaaaaaaaaa	540
aaagcaaatt gggcaagcct tagggctctga accatggtaa atttctgtta ctttgtgagg	600
ctatattggcg accactgtgc ttgtaaaata gctttagtga cagttaagct ttgtcacaag	660
cagggtctac tttgaaattc agtctgcaca tctgcctcta accagccttc cctgtcagag	720
ctcatagatt agctgccatg aagagtcatc ccaaataatgtgt tgggtctttc atggataggt	780
tccgaagtca ttcttacaca ccagagtggta tggtgcaatg gaagctatgg cccttatcac	840
agattcggat ttgtgttagta gaaaaaaaaa attgtctggg aaccaggaaa ttgcggttct	900
agttccagca taatcactta actcaatcta tagttactaa acttcttgag gcctcagtgt	960
attacctgga tacacttaggt tacgttagcaa taataaatta acaatgacct ctcagtggct	1020
tcacacaaca aaggcttatac tcttggtctt cgtgtgtatc tattccaggt ctgcgaaaag	1080
gctctgttcc ctctggtcac tcagggaccc agcctgatgg aggttccatc acctagtagt	1140
ttctgtggca tttctaccct ccttaaccac caggggtcca ggaaaggaag agatggagga	1200
gacgtgcaca tgggctttca ctgccttaat tcagagctgt gcttcacttc ttctcagagc	1260
ccattggcca gaacttgtca tgtgacctcg cctaacttta gctgagctgc gaaatata	1320
ggaacaaaatg gaatcttcaa tgacaattat agtctaggcc atattgagtt tccacatctg	1380
ttgataaaatg tatgataata atagtatgat ttacctcata gagatgttgg gaagatgaat	1440
gcatgtgaca tgattaacat tgtgctggct catagaaagt atttcacaaa ttctagccat	1500
aataagtata ttattattat tattattatt aagtggaaa taagttgttag cattattatc	1560
actatgtaat tcttctaaga gcaaaaagtga ctgtgcctaa gctcttaacc atttgtgcct	1620
aagctcttaa cctgttgagc catcctgaag gcattctgct gtacactctg ctcaaggaag	1680
aagaaaaagct tgttccagga aagctgttg ttgaactgtta tgcccttccc ccctctac	1740
ttggtcctac cccttctgcc aatcctggcc atgactgccc ctgtcagcaa cccaggaaag	1800
ggtctgagga cattggaaagc ctccagctct ttcttctcct acatgatttt ccagggctca	1860
gtgttccct gatgctccca ggctgtcagt gtgagacacc cctgtggcct ccagagtcat	1920
gatggggccca ctcaggtttc ctggcagtaa ggctcatatg caaacaaaac tggaaaccaga	1980
aggaattata aaaatggttc cactcctcaa gcacacttt gtctggaaat gttttcaac	2040
tttctattct gtttggtttg tggaggttaa aaaaaaaaaa aaagagagag aacgaaaaca	2100
aacctacagg atctgattaa aagccaaaaa ggctgttgcggagggccaa cacttcttac	2160

aaacatacaa atgcacagca gactatctga agtcaaggtg gtcttgagc ctaataattg	2220
gtagcaaatt tagccaagct gcttagcctg agagtgattt ctgtccctcg actgctacgt	2280
tggcttgct tgcttacatt tggcttcca aatcagtgcc attccttct acctccatgc	2340
ctttgcctgt gctattctt ctccctggaa cacccttct tcctgtccct tgacacgccac	2400
ctgttgaata aatcccacta attcttcaag gtgtagttt aatgccactc attgtttcct	2460
tctaattttt caaggtataa tcacaaggat tatgtctttg tatgcttataa gcacctagca	2520
tggtgtctgg tggtaataa atgttgagtt gaaatcccc ttttcttcat taattttatc	2580
ccttagtggtt atgtttatgg agactatcaa cggggacaaa gtttcaagaa atttggggaa	2640
agctgcttct gccccagagt cccttcaaga aaagccttaa gtgctgaaat tccctgagaa	2700
gtttaagctt gtaacacttg cagtggttcc cccaagaaat caacccgaac tatcttgat	2760
cctcttacct tgctgaaatt gatttcaaa tgaaggcata atgttagctt catctcata	2820
gaggactttt ctcccaagg aagctacctt gttattatag caactacctt tatggagctt	2880
tcccgattgc aaagtatatg tgcatacatt atcttggtaa gcactcattt tgatcatgg	2940
gcttggtaga gcagaggatg acattgcgta cacaactcct ataatcaagg gaatctggca	3000
gtctctgtta ttccagcaga gtcaatctaa acaaattttg gatggcttgg gggaaagaaa	3060
ctcagaattt accagctgct ataacccccc aaacagcatg aagaaaatga cactgttgg	3120
ttctggaaag caaggtttca tacccaaagaa ttattttagg gatggaaat cccaaatcaa	3180
gtattctcct gtattttacc acatattaa actctgaggt gcttggttcc aaactggtca	3240
atgttagcaac tgaatccggg gccattagcc atttggttctg atccagccac gtcggctagc	3300
agggctctga atcaatttca aaaggacata cccataagag cctttgata ggtgaggttag	3360
gggttagctt ggtggccctg gaagaaatgg gtaactaatg ttccaagagc aaatctttga	3420
ctgggtggag atggaaggcg gtagataat tattctcccg tttttttttt tttttttttt	3480
ttttttgcag ggggttttagg gggaaaggagt ctagctctgt caccggctt ggagtgcagt	3540
ggcgtgattt cggctgactg caacccccc cttccgggtt caagcggttc ccctgcctcg	3600
gcctcccaag tagctggat tacaagcagc tgccaccatg cccggtaat tttttgtat	3660
tttttagtaga gatggggttt cagtagttt tccaggctga tctcaaactc ctgacctcag	3720
gcaacccggcc agccttcgtc tcccaaagtg ctgggattac aggcgtgaga cactgtgccc	3780
ggcccccgggg ttttcttcaagc aaaataaacac acacttacca aagtttacag gaactgtat	3840
tttagaaact ctaagaattt atattctatt ctcaaaacca attttcacag aaattggctt	3900

cataggagtt attttatttt catccttac gatggcatg ctgaagccag taagactgat	3960
tgcaccctaa ctcagagtca cacactggat taggtatc tgaaattata gacaagtctt	4020
ccaaaaatcc atagtcagct agtcaagaga agtagacagg taaagtatga catattgtga	4080
aaagtttat cagttatgaa taaaatatca tgaaaataga gaagatgggg gaatagttc	4140
tctagggaa ttgaaggaag gtttacttct ttggagatgt ccttcttga acttaccaa	4200
aacttaccaa aacttacagc aactctgtgt ttgttcaca tcagtagact tagttgttagt	4260
atcattcctt gtcagagca aagcattcag taagtatttt ggcctgaaaa acagctaata	4320
tatagcggcg accactggcc aggcactgtg tgcttcctt gcattatgtt attaattcct	4380
cacaggagcc ttacgagctt cctcaggaga gaaccaagag taaaagaagt taagatggc	4440
accacagttc ctatgttagag gcagacctaa tcctgaactc acctctcttg gattccaacc	4500
catgttctca accactggac caaactcaact ccattaatta gagaagctgt gttgctgttt	4560
tgtatgtcat tgctggatgt attactggcc acccattggt gcccttaact cattttcata	4620
gcaaataatgaa gactgtcaca gctgggtaa tttagaacagg acctgagaac ccctttggcc	4680
agatgccttc tagaaataac agtgtaccgg tttgctcaag ttggagagct tcattcttctt	4740
gaattgtatg agaattccct ggctaaatgt caagcctaca ggtttacaat cttccatctg	4800
actcttgagc taactaacat ctgagaatcc ctgcattgtt tggctttgga agatatgaag	4860
aaatttagact tttgtctta ggtttacatt tttcgagtcc tgctttcag aagacatttc	4920
cactaggttg ggaatgttat acaacagctg tcacacaaag ttagcagggc gcacatgaag	4980
tataaagtca ggtgaggata ctgcctatgg gcatggaaca tcaaataaggg ccttaaaaaaa	5040
attggacagc attcttaag aggaatcagc cagcctgtgg cctttgaagc agtgcacagga	5100
aagagcccg aaagccttgc ttcttaagt ggcacaactt gcttccttg tggcctcaa	5160
agtcagctca acagaagcca caaacctgag gtttatgagc tggatctgtc tgccaaggta	5220
tgggtggccc gcatggatt gaaacagttt tgaatcatt atcacgtttt aaaatcagga	5280
gtgagaagaa tctggacctc tggccttcc tgaggcaatg aggcaatatt ctgtctcctt	5340
ttctgaacca gcagtttagt acatttgagc agacactgtg ctcagctaa agggagcccc	5400
tgcgcgttca tccagtttag cactgttcct cctcaccctc cactgcttagt cacctggctg	5460
cttcactcat ttccatgacc tgcctggcca ctaagcgtt gcacacatga cctagagcac	5520
agctggaaag acagctgggg gaatacagaa agcagggcag atggctgcta gggcatggc	5580

ttgaaataaa aacttcctg tcctacctgt ttaaaagtcc ctctgctgac ttgccagttg	5640
actctaatgt attggaggt aacagtctaa atttgagta gctggagctg ttgaagtcat	5700
ctctgcaagt cttcaatagt gtgagcacag gaatggttat ttgaaatata gaacactgaa	5760
gcaccaggc gagaggacat cgaaggtgaa ggagccactc accaaagatg aagcattagg	5820
aaggctaaa gtagtaaagt agaattaatt cagttttaga gaaactaagt taaagtgtat	5880
gtagttcctc caagtagaga tgtccacctc acgacgtact tttagaattag aatccaagtt	5940
taaaacctg cccaaagtgcg tgcacctaag cggcctgaat gaaagccaat gttatcttca	6000
tcatacaaat gttagctgct tttcaaactg ctttaatta gctcataggg tttcacaac	6060
tcttgaaat cggtggact cgactttcac ttttagaccc agatacagaa tgacacttat	6120
gaagttcag gttctataat caaattaaga ttacagcctg gggcttaggc ctctggccca	6180
ttgctttcc cactgtacca ctctggtaac tccaagttc aggacagtca agagactgga	6240
ttctactgtc tacacctagg ctttgaatt caaacacgca tggttctgct ctagctaaac	6300
atcatttcac ttactactat atgccaagcc atctttcaa ttttagcaaa agcttttat	6360
catctgagaa tcttttattt ctgaacttcc cccaggtact gtggcatgct gtattctagg	6420
ctctcagcac tttcacatca atcataattc ttacttagag gcatctatgg cagttagccc	6480
caaattcaag ctgctttggg tttcaggata attgatgctt agtaaaatct gatTTTTc	6540
ttttaaaaac agcaacaaat ttacactcaa atcagggttt aaaccataaa atgcagggc	6600
tttaaagctc acagtggggg ccggagcggg ggcagggca acaggctag tcagaggcta	6660
gaatgtaaaa gtgggtacat gtcaggttac tgaacgtcct ggtttgagt ttggcttctc	6720
agattgacct aggatatttc tagcacctgc ctacccacct agcttggttt gaggcaccaag	6780
gatgtacaca catagcatgt cagttgtat gtacttagca gttacagaga tatatttat	6840
ccccaaagct tcctctgtac cagccatttgc ttgggttcat tttaatctt aataccttca	6900
cacataacaa ttatataattt attaaaattt cagatcacct agttctgtt acaaagaagg	6960
ttggagacaa gctagtcgt cttccatttt ttagtctaag acctctttct ttggaaaaat	7020
tcatttgggt ttagtggata actattctag ataaggcaaa caaacgaagt gtttggctct	7080
attaactttt tcagccaaact ttcccttggg gaccaccacc aactgaataa tgaatactca	7140
aaaaagtaca gcttataaca caacttttat tagaaaagtt atacataaca tagcatcaac	7200
tatTTTcaag aacaatatta aaccgataa gcaacaaaaa ccagactaac aaaatgtgta	7260
acaagaaaact aatgacctt ctaaaatcaa acattcaatt atctacaatg tcttttaca	7320

aacrgggaaa actccttggt ttacaggcac atcatattga atrtaaagct gcaatagcaa	7380
ttttatacaa ttaccactct gaagaaactg aatcattaaa acagtaatta cgagttcaca	7440
aatttaaaac atttcacata attttaaattt attgggtata cactgaagtc tgagttcaa	7500
aagtgatttt ttttccac aaaagttca acacttaagc tagaacttc agtgttaact	7560
ttgccctaaa aagttaagac attctgataa tcataacagt cacatgattt ctgatgctat	7620
ctggctgtt aataataaag tctttatgg gatgtatgg tcttcaatta aattacagga	7680
aactggatat aggatttcgt tgcaacgcta ttaaagttcc aaaccaggag tgtgcagcac	7740
tggaaaagga gatcagttact aaaacttaca ataaatatca gagaagccgt tagttttac	7800
agcatcgtct gcttaaaagc taagttgacc aggtgcataa tttccatca gtctgtcctt	7860
gtagtaggca gggcaatttc tgtttcatg atcggaaatac tcaaataat ccaaacatct	7920
ttttaaaact ttgatttata gctcctagaa agttatgtt ttaatagtc actctactct	7980
aatcaggcct agctttgctc atttggagc ctcactaaaa taacagattt cagtagcc	8040
aagttcatca gaaagactca aatggaatga ttacaaaat agaacactt aaaccaggc	8100
agtcctatct tttttagtca gaggctatc agtcataaca caatttcgcg tacacctctg	8160
ctcattatgg aattacactt aaaacgaatc tcaagagggt gaccattgtt gttcagata	8220
ccatccctaa ggagagtggt taacaggaag attgccagtg ttactgatgg aaagaagtgt	8280
ttgtttgtt tttttcttg tcaaagactt acaccatgt tttaaattaa actgtcaggc	8340
attttctcag acaggtttc ctttcaatg cagtaatgaa gaactaagat aaaaatcatg	8400
acttttgact gccactcaac attattacat gcaccaat tgcacacatc tggtctgaac	8460
tgttaaaatc atcttctgag tcctgggt gctgtttct ccatcagaac acaaacacaa	8520
cccatctaatt cagttccct caaagatgaa attgacaaat ttaatgtact ggaaaaaaat	8580
gaagaaggaa aaaggcaaag actttgtaca gacaaaaatc taagtttct caaagggttc	8640
tgtgtccctt acacatgggg gcaatttgcgactg agtgcactgt aatcaaacac tagctataat	8700
gtttcttagt ctttatataa tatggaaacct tggccaggt gttgcgtatca tgactgtat	8760
cggttcttcc tgggtcgactt caatagcttgcgactt agaaccacaa agtgcgtat	8820
ctttgcggca gcttgggttgcgactt tggccgtatt tcgacataac tcaagcaac tgatagattc	8880
agctccagtt ttagcaagag cacgctgaaa taaaaccaaa aaaggtaac ttaatctgtat	8940
taataaagta gtaattcagt gaggatgctg atacagtttgcgactt gttgcgtatca	9000

ctcatgctga aacgtaattt cccagtgta gagatggagc ctagtgaggt gtttgtgtca	9060
tgggggtggg atgggggtgg tggtgatcc ctatcaatc actccctgtg gcaatcagtg	9120
aattcttgct cgtagttaa cacaagagct gcttgtttaa aagcgcttag ccatctctct	9180
catgccctct cttgccatgt gacacacctg ctccccctt gccttccacc wtgactataa	9240
gcttctgag gcctcaccag aagcagatgc tggtgctttg cttcttgat agtctgcaga	9300
actgtgagcc aaataaaactt ctttataaaat tacccagact caggtattcc ttttagagcaa	9360
cacaaaacag actaacacag atgctaattt tggttactgg aaaaaacaaa ctatataattc	9420
tgcttaggac aaagattgca cttttttaaa tagtatgtga ttctcatgtt aatcaagagg	9480
gtaaaaggcc aaagtatgtt atggcacatc taaaatccaa ataagaaagt ccaagaaacc	9540
agcaaaatttgc ttctgacatg tattttaaa ataaccaatt tctttagaca gctaattgtaa	9600
tatagtagta aaatcttagca cttatagttt ttaaagtaaa aaattaataa acacatgtca	9660
actgtcctat tttaagaaac cttgagcaac ttgcttggca ttttgcagac attcaagata	9720
tcctgtctat gtctaggaca ttaaagcaca aggaaaagta acgtctgatg ctacacaatg	9780
acccaataaa tttaatgatt cagcacatta aatttactca acaaaaaaca agaaggtgca	9840
ggcatacaaa ggagttgtgt ggtatgtcac catggttctg cttttcagga aaaccacaag	9900
cattctccctc catgcttttc cggcttactc ttggcctaac agtttatgtta tttaattaaa	9960
actttaacta taataaaaaa aaaaaagaaa agaaaactct ccctccagaa aaaataaataa	10020
aataaataaa aatgttagttt tggaaaaagt ttgacaaagg tatgctttct gtttccagca	10080
tctaactttt ttttttcag ggaacaatgg caaaagcctt tgatgaagca ttttcctctg	10140
agacaacagc ggcaataacctt gaagaccatg aagcatctgc tgagtccttt tgttccatct	10200
tctttcttcc tgatcttgat cgccccctga tgcattttca tcctgaataa aatgaccctt	10260
caaaaagctg acaaaacaag tccaaatgaaa aatgaagtat ttctacatct cctaaaagct	10320
cctaaattac cttgagattt tgatcttga actaatagaa aactgtactt aatgctgctg	10380
agcaatcact tagcatttttag agtacaaactt gaagagtctg tttttcttaa attacaaggc	10440
aaagtcctct atgtgcaagc aaacattttgg ctgaaagtat gcttctatar tgcgctataa	10500
ggatgctatc tacacacactt atgtggtctg tggactgctg ctgatcatgg aggttttgg	10560
tactggcccc tcttaaagaa cttcaggata taaatcaactt gtaccactaa atatactgtt	10620
tatttcaactt aaatatacat acataaatat tgcaacatga ttttcttagat gactaatgtt	10680
ctggcagactt cttatctca ttgtggagca gtaccaaaga gcctgcagac tacctaagtt	10740

gatttatatg gtgtttaaa atgaatggc tatactcctt attatatatt tcacttgagc 10800  
 aacctagttc tcagccacat gctgcctaaa tgactttta aagtccaagg tgggtgcaag 10860  
 gcagcagttg ttagtgccttcc aggctatggt gaaactatac accagccata acagaaacca 10920  
 caactatccc aatactcatt cacaactaag tctgagataa tggcacatcc tcacacatag 10980  
 gtagaagtgg ctctgaaact aatttggct taaaataag atattcatat taaagataag 11040  
 cactattttt agaattaaga acagatgcta ctgaaaattt atccaatcca taacctttt 11100  
 tggcttgaa gaaattttaaa cagcttcaat gctacctaaa ggacaccctt tttttttttt 11160  
 aaaggtttaa gtaacatatac cgatagagta tcaaacagaa gaataaattc taagtcttaa 11220  
 acaacaacctt caatgatcca gaaatttagga agaaaaagaa gaaaaaagac cttcaacagt 11280  
 gtaaacatgc cccaggaaaaa agaaatttgat tcctaaaaca cctcttactt tgtaaaaaga 11340  
 aaaagtctttaa taagccttca ctcagtcctt gtagtttagc aaagttatgc ttaccctgg 11400  
 tccaagttttttaa agaaaaacaa aaacaaaacc cagacaagtg gaaaacatat ggttatctga 11460  
 ttccaggcc accacagata cagaaaaggt tatatcagaa gcagacaata acagcagtaa 11520  
 gaatcgcca ctgaccacaa gatagtaaaa gcagctacac gcaattttaga agccaagcaa 11580  
 gaaatcagtg taaggacaat tccatgtcct tcaaaaacccc acaagagagc caatgagttt 11640  
 cagcgaagca taaaatttga tgttcctaat gatgatcaat accacgaaga atatggtaaa 11700  
 attttgctta tattctaaca tttttaaata actctgatgc tcagcatcaa ttaagttagc 11760  
 cccaaatataa gaaataaaaggc tggttggagg tttttgctaa atctgaaatg aaaatttata 11820  
 attagtttac ctcttcctct tcattcatctt ctttttcctt ctctttrtcc ttctttttt 11880  
 ctggcagaag ttcttaactct ggtatttagct gacagatatt tggaggtct tctgggggaa 11940  
 gctctacagg tggattttcc atctgctcta cctgctgagg cttaaagcaa tacaataaag 12000  
 acaatttaag atatatgctt tttaaagtgc ttatttaaa tatgaaaata cacagtggct 12060  
 gaagttttctt agtcaaaaag aaatactgag attatatctc tatacttccc cacaaggaaa 12120  
 aattttattac agtataatc ttttttgatt ttttataaaa ctacattgaa gtagcttaca 12180  
 aaagaaaactg actgcttatac ctaaaccatg tttcattttc atacttactt tttaggagtc 12240  
 aaatgctttt taactactaa agcttctgta aggttattat attgtaactt ataaatcata 12300  
 agcttcwct ctgagagtct tgaatgtctc acggcagcaa ataataggag tgaggacatt 12360  
 gctttctgg gtccacttcc tatacttctt ctcaggctt acagaaagag ttaagaacat 12420

taaaacccaaa gtctttaaaa gaaactaaag aattaccaga aggaggggtgg ttatgaaagt 12480  
 cacctactca ttactgtgtt cctattcctg agctcataca gaaaaatgct cttattgaca 12540  
 actcttacca ccagagggca cagaaaacta gttctttaaaa ttggcagagt attcttgatg 12600  
 gaggctgaac aagaagccta aggttatcta aaagcctccc tttgcacaaa ttcattttt 12660  
 ctatggactt aagattggaa agccctaaac caaaccctac tatttcctcc ttcatacttg 12720  
 cttagcttc ctatcctagc tgaactcaat ggttagtcaaa gtttgaatga agcagacaga 12780  
 tactgcttta cattttctca ggtatttgaa gtttattctg attacttaat aagatgacct 12840  
 aaaactgcct agtactgaag gtgtgcagga atgtttgcca aataataat cagaaccaac 12900  
 ttcagagtca aggatgctca ctctggagca ctctaaagca atactattca aaaagagtca 12960  
 ggaaagactg caccgactcc cagaacatata tctctcactc cgagtggact gtctatatcc 13020  
 tggcgtctt ctgcctctgg actcattcct taccattttc tgtcaaaacc aagatacttt 13080  
 aaaaggcctc cctaaatacc acttgcatac gactgtatga ataccttcaa atgacttaat 13140  
 ggatagattt gcttacttac aggcattcaca ggctctgggt caatttgc tgctttcgc 13200  
 ttaactccct gaggtggtgg tggaggcata gctgactcat ctatgttgc tctgctggcc 13260  
 tccatcactg actcctggag gcggcttggc tcttcaataa tgggctcatac tgcaattgg 13320  
 catatgaaga gaaaacatag gtcatacagt tttgaacagt attatagaac catttatttt 13380  
 ttaaactagt acactaagac atacataatg ctttctttaa tgaagaaggc cagataaaat 13440  
 tttagctcca taaagattt caattttt agcaatatac gtaaaaggga aaggggatct 13500  
 taaaaggaca agtcctacc tcagracaat gtaggacaat tctttagcag actatctacc 13560  
 ctgccagttc tgaaccttaa akctctggaa agacaggagg cttcatactt aaataaggca 13620  
 atcagatcca atgcatttcc ctgccaaac atttgagttt atctttgattt ctcattttc 13680  
 ttcactctga cagtataaag gtaaaattta agccaaatac tcatgtgaac ttcatcaagg 13740  
 aactattcca acagaacaaa ccgataacat cacgctgctg atgctgctgt tgctggcct 13800  
 ctcttaggaac ctctggattt tcaaattctt tgaggaattc atccaaattt tctgcctctc 13860  
 ctcctttctt ctttttctt aggtttctg gtacaagcgg tgtaagacag cgtgtaaaga 13920  
 gctattaaaa aaaaaaaaaa gaaaaatttc aattataaaa taaatctaatt taaaaagtca 13980  
 ccactgattt ctatcttcca aaggtatgtt ctaataaata taagtgtata atttagcatg 14040  
 gcttttatca tattcacatt tcattccatc tgaaaatgat tttaaatgag ttttcaaatt 14100  
 ataactgcag acatttttaga taaactaaaa aaactgtatc cattatctca caacccctaag 14160

ggctttcta tttatctgcc tgcagttat tttcatattc atcaattaaa actcatccta 14220  
 actggctca tacaaaatag cttaaattg tttttcttc cttacatat gtaaccta 14280  
 ttagctatca tttaaactat ttttttttg agatggagtc tcactctgtc gcccaggctg 14340  
 gagtcagtg gcacaatctc agtcattgc aacctccgca ccccggttc aagtgattct 14400  
 tgcctcag ctcctgagt agctggatt acaggtgtgt accaccacac acggctaatt 14460  
 ttatattat tagtacagac gggattttac catgttagcc aagctggtct caaactcctg 14520  
 acctcaagtg atccactcgc ctcagctcc caaagtgctg ggattacagg catgagcgc 14580  
 tgctctggc ctcattaaa ctactttaa tggtacata atatttcatt ttgaaccatt 14640  
 cctctacttt taaaatttca ggcttcttc ttttaaact gtaaagaaca atgtaatcaa 14700  
 catttcaca gagatagctt ttccacactt tgaattactt ccttaggaaa aatttctaat 14760  
 aatgaaatta ctgagtcaaa gaataaatag tttaaggacc ttctaaaaaa taatttatg 14820  
 ataggccta caataaaagag cacaatgttgc ttgctctggg atactttaga tttagaatat 14880  
 attactat tctaaataca cggtaaaatc aataggttct gtgcataatct caacttcaga 14940  
 cagaatagta gcctaaccgc actgcttcat tcaccagaca cctgtgagtc ttatggaa 15000  
 atactgtgga atgtgagcag aaaagagcct ataaatggaa aaacaaacaa acaaacaaaa 15060  
 aaacaaaaca acaaaaaacc tcctgaagcc agaattctt actgtggaaa aaggagaacc 15120  
 actcatgtt cattcagaaa acattcaag aattcagatg taaaacacac taagacgata 15180  
 taactaataa ttattacag agagaagtat tattaaacac gtcagtggtt tttaatgt 15240  
 aggaaaattc atttacatc tttagaaat gcaggtctca cttatccata tatttcagat 15300  
 gaagttatgc ccagtacact gtgatccaag ggagaaaaaa gaaaatgtgc catacagtt 15360  
 caaaaactt gatcaaaaat gattcaaagg tttagaaatc tttttttt agatgctcaa 15420  
 aatgtatatg aagtaaaaat tctgcaaact atattacatt cagtagtctg ttattccaca 15480  
 aaggctgagc aggtaaaagaa aacagttttt ctactcctcc tgcactgtc cacatcatca 15540  
 atttcttggc gggcggtgcc agatccaaag tagtaacaat atctgaataa tcactaagg 15600  
 gggctctaat tgccttgcta tccaaactctt tgacactgtc aacaattagc ttccctttcc 15660  
 tcttgcttt tgtttctta actggaaatga taataaaaaaa taagatcatt ttccctgagag 15720  
 gccagcatgg aacacacagc tacaagatct ggactgacta tattccctg cttttctaca 15780  
 cacagactct agcagagaag tttaaacttca tgaggataga acgttttaac tcatttttc 15840

caaccaccat tcagaagaga ggctggaca caacrggcat tcaacaaaaa tttgctaat 15900  
 gagtatgtat agacttttag cacaaaataa gcaaaatgac gcaagggcca acacatttt 15960  
 gcctatgtag ttttatactg taaacaatga acatatcaca ctcttcagag ttgggctcat 16020  
 tttctcattt gaaacagggc ccatcaacta aactcacaga ttgagtttc tttaatgatt 16080  
 gtaaatactg ttatTTTtat tagaaaagtt gtaattcaca tatggcagtt gtggaaagctg 16140  
 cttgatagaa taaaacaaggc ccaagcccag tcagatagac ctgttaactc catcctagac 16200  
 attttaagag tcatttctaa tccttacaac ttacaagtag gttgtattgc ctcactttt 16260  
 taaaatgcag aaaagcgcatt ggggttaaat aaaatcctca agatttcacc ctgtcagaca 16320  
 taccccaaag gttttgggtt caacacttaa aaaaaaaaata caaaaagatg ttacacagtg 16380  
 agagtctctc tctaattctca ccatctaata cagtatatat tttacttaat tgcccatttc 16440  
 cctcatcaat gggaaacccca aaagggttaat ctgtctctac ttAAAGGtaa aaactatgtc 16500  
 taaattacac tgaatcaat ttcaagtatt ctatcctact gtcctcataa accatctaga 16560  
 aattgttagg ttttatatcc ccattatctc aaattgtctg tcattcagaa gcagcattcc 16620  
 tcaaattaaa taatgtgtct tgcaatgtta ctaaaaaaaaa ctacaagaaa aagattattc 16680  
 tagaaatttt gacatttcca gtttttaaat ttaaaaaaaaat ttctttttc agaatgtgt 16740  
 gaaaaaggca aattctaaga gtgcataaaa ttTTTaaaattt aattttttct tgaagagaca 16800  
 ggtcttacta tatttactgc ccaagctggt ctcaaactcc tggcctcaag tggTTTcct 16860  
 gcttggcct cccaaagtac tggattacaa gtgtgagcca ccacaccagc ctctagttt 16920  
 gttttttttt taaaaagaat acttttagtt tttccagct cgtagaccaa ctgcacagca 16980  
 tttagaattt tactttattt aaaaaagctt tccaatgttt tccagttgtt acacaagtaa 17040  
 gctgctaact ttctggaaac cccaggagac taagatatgc attatcagaa agcttgttct 17100  
 atactttgt atttcacagc aacttgcaca gacattctac aaaatactca aaattataat 17160  
 tggatagaag aaagactcta tgacagatga ctgtgacata aaagcaagaa gctagttaac 17220  
 taaagcaaca gtagcasatc agtagacagg ccaaaaaaac agaaaaaaagc aagaagccta 17280  
 gttatctaat acaacagtag cagatcaga gacaggcaaa aaccagaaaat aggaccttat 17340  
 gttgtatgct gtataaatct aaagggtcat atgcttacca gttatataaa taggctccaa 17400  
 tgcaaatgct tcttcctcat ttggacaag tggTTTGA tcagtcattgg ttggcattgg 17460  
 ttcaacggga tccactgaat caggactatc aggcccaccc actgtaaaaa aaaaaaaaaa 17520  
 aaaaaaaaaagt cacaaaaagc tttggtatata aacatataatc ccacaaatgg ggaggagaaa 17580

aatctttca tgaaatggaa agaaatcctg ttattactaa gaaaaaatat tttctagtt 17640  
 aatggaaag cccgcaga cttgaaccca attggccaa aaaatgggaa ggggtgcaag 17700  
 attaaacata gaatcagaac cagtaatcat aagcactgta cttaaagata ttataattc 17760  
 actaaaaact acaacttta gtttgcatac ttctatggta agtacatttc tggatgccat 17820  
 acaatcatcc ccagaatcac tgaacatgaa atgcttactt gatacattat catcctcatc 17880  
 catatcgta tttgcaggct gctctggcaa catcaccctt gcctcagaga gggcaggggg 17940  
 atcatcaaag ataccgcatt cattattact aataagtttgc tcatctgaaa tagggatgt 18000  
 aagtttagtta taatttggaaa aagaaatgcc aaaccacaaac agccaatcaa tgaaaaaaca 18060  
 aaattatgtt aaaaggata aaatttaaac gtatactcaa cttttatctg tttctcctcc 18120  
 aggttagtta taaaagtata aaacacttgg tatataaaaaaa aaaattctca ttcttcattt 18180  
 gtattttcta gtttattttt ctatttaaa aaatattttt cttAACACAG ctatcaaaca 18240  
 caaacagaac agtttaagt actaataaaa tttagcattt tgagataagc atatttaggt 18300  
 ttgttacaa cattttaaa ggcttagttt accgaaatgt cctattgaac caactgatca 18360  
 caattcactc atatatatct aaaagctgtt caagactcag aattagcaac tgttccaaa 18420  
 actttacaac ttaataaaaga aattctgttt atgctggaaat aaccatcatt crCACATACC 18480  
 taatattcca ccatcatttc ttctccaaa attatcatcc ttatattgtt cttcatattc 18540  
 taaatggta attttctcat tcagattgtt ggtgctctgt tcagactcta ataggaggtt 18600  
 agaagtagta gtgcttacta acatgtcgac atcctcaaaa gcactgcctt ctctcattat 18660  
 ctcacgatca tccattccaa aatcacctaa acaaattttt atttgcatt agtttagaaa 18720  
 gattagaaaat agcactgtga taaaagaaaa ctgctaatgaa ttatattctaa ttatgtcaca 18780  
 ttgcattact gaagtcttac ttcaaatgtt aaaatatcta gtttaaactt taatttaaatt 18840  
 cttagcattc tgaattttt aaaatgactc aattacacac agttacaaca ctggggcatg 18900  
 actagcaaat tcaaaacttag atctagattt aaatgatcct aaaatatgtt tgataaaactc 18960  
 taaatatgtt tttatgtttaa gttacattaa cagtcacagc tgaaacttcc cggttataat 19020  
 gtgttcattc aagaaaaagaa tctggttctg ggcacagtgg catgtgcctg tagtcccagc 19080  
 tacttgaggc tgaagtggaa ggatcacttg aatccaagag ttgcaggctg tagtgcata 19140  
 taatccagcc tttttttttt aatccatc cagcmtggat aacacagcag agaccccgcc 19200  
 tcttaaaaaaa caatatgcct tgcttaacttag ttttgcataac ctgttttgc atagcaagta 19260

taacaggaa actaactgtt ccaaaatggt tggtaaac gtgatcacca cttcaatgtt 19320  
 gggactcctc gcagaaatca atatataggc tctytgattg catataggga gagaagtagg 19380  
 taaacaatta gctccaagta tgaaaataat gcttaatcta ctggtagaaaa gccaaattct 19440  
 tttcttgcgtg aaaaatgcatt acatgaaatt ttaagtcttt ctgtctatag tctggtttc 19500  
 ttttggaaatt gctatttagca acacaatata acattataat taatggctaa taatttgttt 19560  
 ctcttttacc aaaaatcattt tcttgtaaaa tactgatgtt cccaaattct tctctcatgg 19620  
 ttatctcttc cactctactc tgattcaagc tgaactgctg ggccacatcg atgtcacttt 19680  
 aaaaagaaggt caaatacatt ttagttcaa gtctatgtat aagaaaaaaca aatcccaatt 19740  
 ctctctataa gaaaaattaa aaaaatataat atgtataacc caccaagttt tagaagcctt 19800  
 aatatttaat actttcacac attccagtac aatccaagaa tgtaagtgtat ttggaaattt 19860  
 acttgtattt aaatttggaaa agcatcaata atcagcaaata acaatgtat atgcagaagt 19920  
 cactaaatca agtacagagg aaaaaattag aaatcatggg ctagataggc atgggtttc 19980  
 attaggaccc tgcaacttac aggcgggtga aactctaaag ttccctgact tccctgagac 20040  
 tcagtttctt tctctaataa agaataatct ctcatatagt ttaaaaatac taaataaaaa 20100  
 ataaaaagta tgtaatgcta aacaccaatc taaacactat cagccatatc cagaacattt 20160  
 atacctcaaa acaactgacc aagtctgtac aaaaaataga tggcaaggaa aaaaaaaata 20220  
 ggaggcggca aagctgtaat agattctcgag gagaccata agctatatac accagatgca 20280  
 gttttagac tttgttttagc ctcaactcga actggggagaa aaaaaaaaaa aaaaaagccg 20340  
 acatgtcaac tggggacatt tgaatgctga ctggctatca tataggcata cttgtttt 20400  
 ctgcactttg ttttactgag tttcgcagat gctgagttt taacaaacca aaggtttgt 20460  
 gtaacagtgc cttaagcaag tctgtgggt gcattttcca acagcacaag ctacttcat 20520  
 gcctctgtgt cacattttgg taattctcat gctattttaa aatttttcat tattatattt 20580  
 gttatgtga tcttgatttag tgatctttaa aatttttttc cttatttttt agtagacatg 20640  
 gggggcggg atcttactat attgcccagg cttagtctcaa acccctggcc tcaagtgatt 20700  
 ctcccaccta agcctcccaa agcactggga tcataagggt gtaccactat acctggccca 20760  
 gtgatctttg atgcttagtatt ttaatttatt ttggagtgcc acaaaggatg cccaaataat 20820  
 atgggcaaac ttaatcaaga aatgttctgt gtgttctgac tgctcctgcc ctccccacc 20880  
 cccgcaatgt ttctccctct tcttgggcct ccctgttcct tgagacacaa ctacattgaa 20940  
 ataaggccaa ttaataaccc tacaatggct actatttgtt caagtaaaat gaagagtcac 21000

atgtatctca ctttaaatca aaagctagaa atgaataagc ttggtaagaaga aggcattgcct 21060  
aagctgattt aggctaaaag ctggccctct tgacccaaac agccaaagttt tgaatgc当地 21120  
ggaaaagttc ttgaaggaaa tgaaaaatgc tactctagt aacatgaata agaaaacaaa 21180  
actacccat tggatcatatg gagaaagttt cagtggtata gacagaaagt ttggaaagaaa 21240  
ttaacattaa ccctgatgca tgactttgag gggttcaaga cttcagtggaa ggcagtaact 21300  
gcagatatgg tgaaaaaagc aagagaacta gaattagaag tggagcctga aggtgtact 21360  
aaattgatgc aatcttggaa taaaacttta acaaattgagg agttacttct tatggatgag 21420  
caaagaaaagt ggttcttga gatggaatct actcctagt aagataactgt gaatattgct 21480  
gaaacaacta caaagggttt agaatattcc ataaacttgg ttgataaagc agtggtaggg 21540  
tttcagacga tttagctctaa ttttggaaaaga agttctactg cgggtaaaac gctatcgggt 21600  
agcattgtac gctacaaaaga aatctcccat gaaagagtca attgatgcag caaacttcac 21660  
tggatgttta tttaagaaa ttgcccagt tacctcaaac ttcagcaacc accacctgta 21720  
tcagtcagca gcccataaca tggaggcaaa tcctccacca gcaaaaaaac tgcaacttgc 21780  
tgaaggctca gatgatcaact agcattttt tgcagtattt ttaagataag ctcactgct 21840  
ttttaaacat aatgctattt ctgcacactt aatagactac agtacagtgt gaacataact 21900  
ttttaggca ctgtgaaacc caaaaatttgc tgtaacttgc tttactgtgg tggaaccaaa 21960  
cccacagtat ctccaaggta tgtctatatt aaggaataac tgataatttt tttaaaggta 22020  
tgcgtttca tggaggcttt aaaaattctt tacctctaag agacaaatat cgaactattt 22080  
cagatgaaat aagattatttgc ttacttgatt taaaataatc tgggggggt tgcgtttca 22140  
gctggggaaa cagatgtaat aagactggca atataacttgc aactaaaaa gctgaataac 22200  
tgacatataa ggttcataat cctaatttct ctgttattt gctatgttta aaaatttcca 22260  
taataaaaaa ttttcaataa aaatgtcaaa aagagagaaa aaagtaaaaat agcttagatag 22320  
agcctagaac taatcaacac acatgcagta acaaaaatagg tcataacttta ctctaatttgc 22380  
aagccacaga tcatttcaaa aagcagagaa atctgtatg gtgttaggtt tttgggttgc 22440  
cagttatgttgc aataagtgcac ttggaaagct acagtcacgt tccaaacatca tggcatgata 22500  
gctggatcgt aagggttgc gaaaaggaaa acataactac agtactctgc tataacagcc 22560  
atctctgtgt aactctctcc tctcaaatgt gtgtcatgac aatgaccctt tttgttgcctt 22620  
cataaaaaagt tatctcgat gttcattttaa aacaaaaata aaaaacaaacc agaacagaat 22680

tatggctctg agtatacgct ggccaatcca gtagctgact ttaatatata actctgaaaa 22740  
 atatcatgaa gcaacagttt acattccctg ctatcattat ataacaagcg tatctgtttc 22800  
 agtttacgta agctttggcc taagcttgc aaaaactctca catcttagct gtgttaaagc 22860  
 tgacatccac atgattttct tacagaagaa caactttcta ggtttatgt tccatattta 22920  
 tatactatcc tatataaata tatatatgca ttttagctgt taatgtaaaa cattccaagg 22980  
 aaaaactatac atttggaaagc taatactact gcttattgca gaccaagtca acaattttt 23040  
 ttaaaaagaag acacatactc taagtcaggc agtggctgat caaagtcatg aaattcttca 23100  
 ggtaaagtaa tggcattata agctgcttcc cgattttcct caggcaggc aaccacacct 23160  
 agaaaagaaaa tgctaagctt aaatatctag ctacccataa attatctagg gatcagaggg 23220  
 agataagtag gtataacttc ctaagtttat attctcatag aaaggtttagt aacatatgca 23280  
 aaatacctt aagcacaagt acttctcttt ttccatgctc ataaattgtt ttcccttgctt 23340  
 taggaaaaag tcaaaggact aattatgcat taagctcata aatgtttaaa cggacatatc 23400  
 aacaaataac tagtaatagt ttccataatta aacatgatat ttatgagggg gaaaaagaat 23460  
 aactgcagaa gagtacctt aatgtttaaa ggagctgggtt attttggaga aagaattaca 23520  
 caattttat ttctttatc ttttcctat attttcaag ttgtctataa taaatatgoc 23580  
 ttactttgaa agacaaaaaa aagcatgtt atttagataaa atgtgctttagt tggtcacatg 23640  
 ttaatttaag tattttagtc tttttctaaa tattttactt ttaaataaaa tcttagatct 23700  
 cagacatttt actgttcaca tactgacata aactgaagta cttagatgtt tcctcagtag 23760  
 aaactgttta aggcatatttta taataaaata cacatttattt taatttagaat aaaaatttca 23820  
 tcaatgcttt taaaaattat agaaagatat gtgaatttta atattaatta tctwcttaga 23880  
 tggtgggtgtg gttggcagac tccagttta taaccaatca ttacctaaaa caaaataaca 23940  
 aaaaactacg aagaatattt acttaggaaa aaaagtttaa aatcctaaaa ttgtctttc 24000  
 tgagctatat tttaaaaaat catcacataa caatttagttt ccaacatttt aacctcttga 24060  
 tgactcaagt ctatgtaaagc tgctgaaaaa agtattttaaa aggcagctcc aaaggaagaa 24120  
 caaatggggg tgagctccat tacttcacag ggagaacaga cgcaagtagg ttccctccct 24180  
 tgaagcactg cctccccaaag ccttgctcta tctttgaagg gttccctcgta tttcaattaw 24240  
 aacaaagcat gtagatttag aaaatgtgtt tagtacagt aacacaaaaa acatgagaaa 24300  
 ctccaaagta aacaacaaca acaaaaaacca aacaagttta acaatacctg gcccggaaaagc 24360  
 catctttatc ttaatgaatg ctccattaca gtctgcaaga aggtatttgg ttccctgtg 24420

atagattcga actactccca gtaagagatg tcctgatgtc cgtaatgccca tttcaccta 24480  
 tgaataaaaac attaatcata ttccaaaacc tgatttcgt gccattcata gtcttcttt 24540  
 tatcttttc cttaaagtt gccttataat cacatacatt tctctgtcct tacctataaa 24600  
 ttccctgaat atcgaatatac ctgaaaagac agagtactg gaaattcacg aattaacaca 24660  
 aacatgaagg aagctaggaa gcaagcacta aaccattcca tgaattgtgt cattagcaca 24720  
 ttaaggagca cgtaacactt ttgggtgcca atccagggcc attgttctt gctaagtcaa 24780  
 ttctgatttt gtttgagaag caaatgtccc ccacattgac agatgtctca ttccctctcg 24840  
 ctaatacctg ttcttcagtg ggcattgaaac acagttcagc caattgagta ataggtgaag 24900  
 tatgccagag agtttctgag aaagattcc cccccaagg aacaacgcct ctcttccttc 24960  
 cctcttcctt gcttgtgaa taggtaggc ttgcttggc cttcatgcag tcaccctgta 25020  
 aaccacaatg ctaaaagtatg aggacaggaa gctaacacac taaggatgga gagttcttgg 25080  
 atgacataat caagctgctg gaccaatctc agatctccct gtttccaaaa tttagttaa 25140  
 ttaaggcctgt tattttccctt attgttaag ctactttta actaagtttc cattaattgg 25200  
 aaagcataacc gatttaaaaaa aaaaagtttgc gaaagcatac taattgataa agaacaatag 25260  
 tatccatagc ttttttcac cagaaaaat actcccaacc tttttcgag gcagatcttgc 25320  
 atcaacatta acatgggata cagttatgtgg aaaagcagta gttgataaaa caatgagata 25380  
 agactccatc taaacacaag tattcaaaat tcctctagcc ataaggaaaa tttactgaaa 25440  
 gaacaaggca atatgaactc aaacatcccc agatacttc ccaaaccacg ccataaaagca 25500  
 caacaagtcc taaggtaaca aaaaaagctt taaacattt gcttaatgtt taaattatga 25560  
 ttagtatatt gttatttgta aaagaaaatg ttgtattttta aattttatgt gtatttctt 25620  
 cagcactcta ggaccctact tatgactctc aggttctgtt tttatgagca ttttatgtga 25680  
 cttacagcat aaatgatgat gtatatggcc atacatttt agacatccaa aattataccaa 25740  
 aatttgcata caaattcaga atttatcaga caatgaatcc ctaattttaa aaaaattcaa 25800  
 agtaaaaatgt tgctcctaattt ggaaaaacag aatctatttt tatgtgggtt tataaaattt 25860  
 aaaattaata ttgattgaac ctccacccaa gaacaaaggaa gggaaaaaaa acctctgcta 25920  
 ttatcttatac tagaacttagc aactttcaaa aagtgggttt tgggcaaaag ctttcttct 25980  
 ggatttagtct ggttcagagt tttagctttagg agtaggtaaa atgaggtatg gcataatgtt 26040  
 ttgagctgt gtgtgttaaa gtgtaaacat aaatataata aagattccag gctacatattt 26100

ctgggaaagc tctgcaaata gggccagtgg ttcttccagt gggggagtgg aagagagaag 26160  
 agaaaaagta tgcaagctt cagttgcaaa tgagccacgt gtgacactta tgctaaacaa 26220  
 ctaaactgac atttcacaa caagaactgc acaccaaagc aaacattaga aatttcaggc 26280  
 ccgttcactc tgtggaaata tctttacatc ctgttaccaa atagataaaa gctcagttag 26340  
 aaatggttt aaaaatttga agagaaatca ctttctctca taaacacatt acaatcttt 26400  
 acattattcc tgaactgtct gcttcctt gtggctgttc gtgtatatgt tcaattatca 26460  
 gattgtctca tactcgttt tagtgcctt aaagtggcac aaagtactcg gtacatatca 26520  
 tgaaaaaaat ctgttatcct tttaagccac tcaatatttgc cttacggatg ttaaagatta 26580  
 gccacacata tactttccag aaaggagtac gatttctacg tttccatta acttatccca 26640  
 gtaagcatac ctataaaaaa aattgaaaat accaatgttc tcatacaatt tgaccrgcag 26700  
 tgcaaactgg tatgatctca ccagaacaaa ctgttagtgc atatcacaaa tctcaaaaac 26760  
 atgtccatca ctggcctat caattataat cctaaaaata aatcttaaga aacacttaag 26820  
 ggcgtgaaca aacatttaac aagaaatgtt tactaaatgg cttagtctt aaaaagaaaat 26880  
 aaaacaacct gtaatcctac catctacaga aatctgtaat aatctttgg tatgccttct 26940  
 aggcttcct gtgtacatgt acacaagttt tctttgtgtatacataaa aactaacaca 27000  
 atgattgtta gaaggctgca tccagggaaat agagcaaaac ttacgaaaag gcacagatt 27060  
 cttataaaca cccccccctt cacacacaga taatcttccc cacaattgac acctcccatc 27120  
 ggtgtttcat ttattaaaat cgataaaactt atattaacac atcattacca aaagtccgta 27180  
 gtttacatca gggttcacac gtgggtttt acatttttatt agtttgtaca aatgtaaatg 27240  
 gcatttaact attataactat catgcaaaac agtttactg ctctaaaaag aatagtctgt 27300  
 gctctgccta ctcaaccctc cattctctcc ccaacctacc atcttttac tgcatttcatt 27360  
 gtatagtttt ggctttcca gagtgccta tagctgcaat catataatat gtagccttt 27420  
 tagattggct tattatacta agtaatacgc atttacagca cttccacgtc ggttttttt 27480  
 tttttgaga cagggctc aataaaagct cctctgagga acagatcgt aaacaatatt 27540  
 tgggcattgc cctgactgat gcttatttgc cattaaaaat aggcaaatca aaatataatgc 27600  
 acttagagat ttttttaaa atctaattctg taatcatatc aagtctatct agaggtgata 27660  
 aggacttcay ataataaaga aacattctca aggattttcc ttgcactcca atgcccctac 27720  
 ctaaaaaaac tgtttttagaa gttctatttc acatataat aaacaatcaa caaagtgaat 27780  
 aaaaatgtca acatcaaaca tacctttggt gagatgatac tctccacgct gctctctaaa 27840

ttacactcga acacatggc tttggtagc ttcttatccc aatggccgc tagccaaatt 27900  
 ttggccagag gccctctttt actgagaaca aaatgtgcgt agaacattgt tctggctggc 27960  
 tatgaaaaca gaagaaaacc taagagggga aaaaaaaagtt aatgtaaaca tcatctgaca 28020  
 atttaatac ttatcaagac ataagaatt taaaattttt cttctcttt taatatgaaa 28080  
 actataaaat gctttagtta atgtttaata tgtatttaa aaacaacaga tttaaaacaa 28140  
 atctattgtt ttaattttga gagagaaaa aaaaatagac cccaaaatac taagagctga 28200  
 aagtaaaagg gacaagagtc aaattgcttt catgccttgc ttcatttcta tcttgattga 28260  
 cagtagaaat agtctgttta ctggccaaga gctagagaat atattttca tggcaagaaa 28320  
 agaaaatcta tgaagaaaga tactcaggca cagataaaaa tctgtggaaa ttccatttt 28380  
 tagaatgcca taaaaaatcg cgattctggg ataaattatc tgtaaaattt ctactacacg 28440  
 aaaagtactg tactaagcat ttcatattcc accaagcaaa gctaagcaga tggctggcc 28500  
 ccattttaca ggtgggttagt ttagaaaaat cgaagttcaa aaaaggtaaa gaattatata 28560  
 tatagttttc ttaacttaag aacttacaaa gcatttatct acttataatt taaatattaa 28620  
 atcagggaca atggcacgc agatttatct tatgactgaa agtcttgaa tcacaaatat 28680  
 gttactgaca ttctactttc cttagcact ctaatgtatt aagaaaggcc gcttgaaaac 28740  
 cccagttcag aagagtacat taactgcagg atatttcattt tatatcattt aattccctc 28800  
 tttcacggat taaaaagaaa tctacttcag agaatgaatt tccagattt aaacaaatct 28860  
 attgttctga ttttttcta aaatgtccac gactagaaaa tgatatatgc cttgctttac 28920  
 agaaataaaa tcaagtgcac gtacaataca taaaattttt atttggaaata gagtcacagg 28980  
 gagtcataga tagcaggtcc catgtacttt tttaaaccta gtttctccca atggtgacat 29040  
 cttaaataac tacaatatac tatcaaaacc agggcactga cattgattca atgtgtctac 29100  
 agactttat accattttgt cacatatgca gatgtgtata atcaccactg caaaaagata 29160  
 cacagctatt ccatcaactac aaaactcatc acattcatcc ctctctctt gccatttcta 29220  
 agtcttgaca aacaccacct gttctacatt tctaattttg tcacttttt tcttttaaga 29280  
 gatgggtct cattctgtct cccaggctga agtgcagtga tgtgatcaca gctcactgca 29340  
 gccttgaact cctaggctca agcaatcctc ctccctcagc ctctcaagta gttgaaacta 29400  
 caggcattga gtcaccacac tggacttaat tttgttgtt tgagaaaaatt atataaatga 29460  
 atcatatggt atgtgacttc ttgaaatggc tttttgatc tagcacaatg cttctgtat 29520

ccaagttgtt acgttatca atagtatatt ccctttact gttggacagc attccgtgag 29580  
 attcatatac caccatatgc ttggacattc acctatagaa ggacatttag ttgcttccag 29640  
 tttttggcta ttacaaataa acctgctata aatattcatg tacagacttt tggtaacat 29700  
 taagtttca tttctctagg acaactgtcc cgaatgtgac tgctgacaag tattgttaag 29760  
 tataatgtta gttttaaag aatcttaat acaattatca aaatgagttt ttttatattt 29820  
 ataggcaaga ttatcaaatt tatataaaaa agcaaataaa ctaaaaaagc taaaactatt 29880  
 ttgaaaaata gtgagaaaaa ttagtctatt tgatttcaag acttactata tagctataat 29940  
 actcaagatt ggtattagca gaggaaacac agtcaatgta acagaactga gaacccagaa 30000  
 atagcccgca caactaagtt caactaattt tttttttttt ttacaaagat gcaaaagcta 30060  
 tctaattggag aaatgataca ttttcaaca aatggtgctg gagtgattaa atacgatctg 30120  
 aagaccagaa aacatgcacg cacgcacgca cacacccccc acaaaacaaa aaaggcaagg 30180  
 aaaaaaccct ccacctaaat ctcacacatt atataaaaaat tcaaaataga caaaactttt 30240  
 aaaaaatggc agaggggaac cttcagtacc taaagcttgg taaaaatttt gacacatcaa 30300  
 aaacacaacc catgaaggaa aagttcttgc tcaataaaact cgcctttatc aaattaaact 30360  
 tttgctctac gaaagaaaatg caaagacaag ctatagactg gggaaaaat atttgtaaac 30420  
 cacacatctg actagaactc agatataaaaaat tatgtaaaga attctaaaaa cttcaggggt 30480  
 aagaagaaaa aaaaactcca attagaaaatg aagcaaaaga ggccaggcag gctggctcat 30540  
 gcctgtaaac ccagcacttt ggcaggccaa gacaggcaga tcacttgagg ccaggagttc 30600  
 aagaccagtc aggacaattt ggcaaaaccc tgtctctact aaaaaacaca gaaactgcta 30660  
 cgtgtggtgg catgtgcccc taatcccagc tactcaggtg gctgaggcag gaggattgct 30720  
 tgaacccagg ctgtggaggt tgcagcgagc tgagatcgcg acactgcatt ctgcctggg 30780  
 tgacacagca agactctgta taaaaagaaa aaaaaaaatg agccaaagaa gagaaatttc 30840  
 acagaagagg tttactgatg acaaataaga acatgagatg ttcaattatc ctggcattt 30900  
 gagaaataca aattaaggcc aaaaacatta tcaccacaca cttaatataa gagctaaatt 30960  
 aaaaaatagt ggcaacatca aatgctgaaa gacacagaga agctggatct cttacactgc 31020  
 aggtggact aaaatctttt gaattagctt ttctctaaaa gatacagagt aattatttt 31080  
 catttttca cagtctgtaa atcttaaaga attttgcctt ctgtactttc aattaaaaat 31140  
 gtgccaattc tttcccatga tggtagagaaa atatattta gttacgcgtt tcacaagcaa 31200  
 cagatttctt acatgtcaaa aatattttgg aggggtggggg gctgtggcgc aagactactg 31260

cagtcagggtt tgctttatct ccatttccat cacttaagag taaagagtct tgaattctc 31320  
 attctctgaa tctaattgttc ccaaaggatt attaattcat actaaaaaaa ctttccwca 31380  
 aaagaaaaaa aaccaggctt tgtcaactgt ctaatgtgt aaactcttcc tcccaaattt 31440  
 ggagttaagg aaggaagaaa ttggctagcg gtgggtggctc acgcctgcca tcccagccct 31500  
 ttgggaggcc aaggtaagag gaatgcttga gggcaggagt tccagaccac cctggtcaat 31560  
 atagcaagac cccgtgttta tttttaaaaa aaaagaaatt aaagaatgaa gaaatactat 31620  
 attctatact aagaactcag aaaaaatatt cttaaggtac gagcattaaa taacacctca 31680  
 aagggtgttt atttgcatt tgttattttta tagattaaaa catgcttccc ataccggaag 31740  
 agagcctcct atgtttcaaa tcagtgccta cttcaagcct taaaatgtta tcacaaaact 31800  
 taagctgctc ctactatgtt ataaataaaaa totagagaac tttacagaaa tccaacatag 31860  
 cagcatgttc tgagaaatat aatcgctgtt gtacaggaca agccccaaagt tccactatgg 31920  
 aagcaagcaa ctgtatccta aacaaaaaaac tccttaatata taagcttcta gaatactatc 31980  
 tgtsgcatga caattactaa atatgtgctt aatgaataag taagtaagat ccaccaagtg 32040  
 atctcataat tggcatatgt aaaaaatttt agacgtttta aaaattaaaaa ctactggcat 32100  
 ttttcaacag gtgtcagtag ctccctggcca gcacttcagc tgctggtcag agcaccgtgc 32160  
 ctaaaatatc ccagctatgc agaggcagag attcctaaac agaaggctgt ttggcatagg 32220  
 atggggctaa ggaaggcaga gtgtatgctaa aattatgtg ggaaacaatt agcaagagga 32280  
 aatcactcta ataactaaag gaagccaaag gagcagtggt ggatcgactc ctgggtgtata 32340  
 tctgaataag gagaaagtgt aattataatt gccttttaag cctatTTTT tttccttgat 32400  
 aataccaaac ttcatccaat cttaaaaaaa gtcgattaat ctgttttagat tttgaagatt 32460  
 ctatattctg ctaaatcctt tatgaaaacc ctgtgcagaa aatctgcatt tgataccaga 32520  
 gcacaactta gcatttcatg atttgagaat cattttttc taaagcggca agcagtttt 32580  
 ttcaattgac cctaaaaaat taaagtctga tgtgaaacag cagaaagatt gctatTTTtag 32640  
 aacatattca agaatacaaa aaatggcaat ttaagactgt ttcaaaagaat caaactgagg 32700  
 ctcatgcttc taggatagta tcagtcatta ccaatatttc actcattaga aagcatggca 32760  
 ggactgcgggt tgtgtaaatt ggtactgtcc tctctgaagg acaatatgac aacatTTTat 32820  
 aaaaatttca cttacacttt ctagccagaa cttgcacttt cagtaatcaa tacaaaagat 32880  
 atacttggag atgcattatca ctaaagacaa aaccaaaaaa ccaaacacga aaaaatccta 32940

agaaaaactta ctaagcacta cgtgtttat gtatccaacc tcttcatgac tgtcctacag 33000  
 aagtaaatta ctggccatt ttagagatgg agaaaacaga tgaagataag taaatgtcac 33060  
 tagtattaa tggaaagtgg aacttgaactt cagaatccac acttcttaact acaacactat 33120  
 gctgccttgc cagagcagaa cagaacattc gaaataacct acttggccat caataagtga 33180  
 tatgaaaaat taataaaaccc aaacaacgga atatagtcgg tcctcattat ccatggcttc 33240  
 ttgcattccat ggactaaacc aacccaggat caaaaattgt tggagggggg gacaaaaaaaa 33300  
 cacaataata aaaaatacta ctaataaaaa actataacaa ctatattaac tattaacata 33360  
 gcatttacat tgtaatatca taaatggaga tgatttgaag tatatggat gtttagtaggt 33420  
 tatatgcaaa tactacacta tttcatataa gcgacttgag cattcggtt tttggtyctg 33480  
 gaaccaattc cccttaata tcaaggaca attgtacagt acaactttaa acaagaatac 33540  
 aacatttgtk ctaacatgga aaatctccag gtaagtgc aaaaagttgg agttttaaaa 33600  
 aagaatgctc tttctctata tatttacgag ttcttgaata agcttaaaat acctgtggcg 33660  
 tacacatgaa actgstgata ctggttacct ctggaaagta ggtatgcagg gcaagtgagg 33720  
 cctacccccc tgtactgttt gatatatata tatacataca cacacacaca cacacacaca 33780  
 cayatatttt aactcgggac ataaatgtac accacctatt caaagtaaaa actactatct 33840  
 cagaagtaaa gacataatcc tgctattgtc attaacttagc agttaagctg cctaaccctt 33900  
 atgcagttca gtttccctac tatgaaaacc tggaaaggttt aaatctggtg gtttacctaa 33960  
 ccttgaaaaa cgtcaataacc taactcagat cagaacggag ctacctttc aggggagtag 34020  
 ggggaaggat ctctgaagat atttctaacc ctgcacacta gaaatctcct ctgttttgtt 34080  
 tctaacatcc tttgaccaag agttttacaa tcagacagtc gtaggttcaa attaagctcc 34140  
 ctcttgctc agttgtttttaacggtgaa taagttactt ctcaactata aactgggata 34200  
 atattcatca aaaaagatta tgaaaattaa atacaagggc acacctaaca tagtgccact 34260  
 gctgatgcga aaagtaactc tgaagacaat cttgcagcaa aacattaacc agccagtata 34320  
 atcatgccta acaactctgg tttgacattt aaactaaaaa cacaacctta tttctcaaga 34380  
 attagaaaat ttccattctg taccaaactg taaaagcggtt tcttagaatt tgtatgtttc 34440  
 acaaaataat tcaccagaaa ttctttgtt attctgactt gtgtataaaa aaaagcacta 34500  
 tgtctattag ttatgcactg ctgtcacctc aactatacaa actgttaact tatttgaaga 34560  
 tcagatatgg cgtatgtcct catcaatgcc tttccaaaaa taatttagttt cctccgacat 34620  
 taacaaaggt attaatgac ttcacgattt gagaaacctt ctcctgcctg tctccaaaaat 34680

tctatagact cgcacwgccc gctggcattt acacccaatt taagaaaata gaaattttg 34740  
 cctgaaaacc aattactctt ctaaccagta taatgacaac aaagattaac tttcccttgc 34800  
 aaaaagaagc cgataaacac aagccttcc cagaaactct tcgcacaaac gctgttttt 34860  
 ttttcacgct gaagacacta acaaattcaga gtgaccaagt aaatccccca ggtttccct 34920  
 cttacaaatt tgaagaaggc cgctaagtct ggcagcacaa cccgacagtg tcaccccaca 34980  
 ctatcaaagc ggtatcattcg caaaaagcct tttcagcga cgaaaaggc atcaagcatt 35040  
 tatcagaaac acacacctcc cccagagcgt ctctacaaca cccgatatcc ttaatcactt 35100  
 taaagaatga tcagaaaagt tcagggaaa accaattatg caaatatcct tgaaaaaaga 35160  
 agcaacttcc ctccgtctct tttccacgc gtctgtgaaa tattcagcat tcccaacgta 35220  
 aaaattatct tttaaaacg ggagggcagc agcagtcact ggccgagggg cacccgcccga 35280  
 ccccccggcc caccggccc agccccacca gctccgcaact ttcttgcggcc cccgacccgaa 35340  
 gttcggcggg aggttgctgc tccccgggct ggcaccgcgg ggcggggcc cggccacccgaa 35400  
 tcctccaga cagccatttt taccggcggg gttaggcggcc cgggtccccag agcgggctcg 35460  
 ttcaaacctc ctccccctccc tccgcagccc agggtttccc cggcctcctg ggggacgtga 35520  
 gatggacctg cagggtaaca gcctttgttag atctcagaat ggatcagaat catttgcac 35580  
 cgaacaagcg atgatgcggg cccaaagctgc atgggtccgg gcccggggcg ggccggggcc 35640  
 gaagggggct gggcggtgg cggccggcgt tggcgccgg gagggtggca gcacgcgtgg 35700  
 ggcggcggcgg ggcgtgccttc tccctgcggc tcccgccccc aggagtccgg ctccccgac 35760  
 gcagagcggc ggggaaaggg tggggggagg gagctggagg aaaagaaggg gtcggccgag 35820  
 tcttttacct tgctctccgc tggagttgg gcgggtgggg tggccgggg aggggaaaag 35880  
 ggtcgaaaaa ggggggtgggg aaagggggga gcccggcgt ggttagctt ccgagcagct 35940  
 cccgcccgg ccacagccgg cgcctccctt ccgattcaact caaacaaca agatggctgc 36000  
 cggttacggccg cggcttcc tggccggccaa atcctcggtt caaatggca ggatgtttac 36060  
 ggtcaaaatg gtacctgtgc gcctgcgcag ccagcccaag ccccccctc ccccccagaag 36120  
 gagcggcgcga ggcgcataa ctatttcctt ttctttggaa cccgcctct gttgtggag 36180  
 tccacaactg agcaagcgca aaggtgattc tcttgcgagg gtctttgaga gttgcgggtgt 36240  
 tagccaatag cgtaagataa cgcacgcgcgt gtgtttccca gtgcgggtgaa tatttgcgtt 36300  
 tagctttattt cttgtgcattt tttttaaagaa aaaagctgtc gtgggtgcattt tttgtgtgcc 36360

cccaccaaaa aattcatttt atggctctat agggatgaaa gtaacataaa aacctcaaac 36420  
 taattccata aaatatagag gttcatttat tcagtcaacc tatattatag agggtcttct 36480  
 gtttgctaca cggtgggctc tggatataat gattaatata acagagataa taactgcctt 36540  
 ttggaaattt tcagtattgc ttgggaggaa tcttaaaatt tcttatctta aaagacttac 36600  
 ttgtaccacg aagaaattt a cttttgttt tattgttagag atctttccag tgatgaaaga 36660  
 aattgaagag gacacacaaa aatggaaata tattccatgt tcatggattt gaagaatcaa 36720  
 tattgttaaa atttccatac tacccagagc aatctacaga ttcaatgtaa tccctatcaa 36780  
 aatatcaatg acattcttca cagaaagagg aaaaaaaatcc taaaattt atggaaccac 36840  
 aataagacca agaatacgcca aagraatcct gagcaaaaga ataaagctgg aggcacac 36900  
 ttacctgact tcaaattata ctacaaagtg atagtaaaca aaacagcatg gtgctggcat 36960  
 aaaaacagac acatagacta acggaacaga atagaggacc tataaataaa tcaatacata 37020  
 tacagtcaac taatttctga caaagctgcc aagaacatac gttggaaaa ggatggctc 37080  
 ttccaaaaat tggctggaa aaactagata actatatgtt gaagaatgaa acagatcact 37140  
 atctttgcc atattaaaaa aatcaaaaca aaatggcttg aagactggaa tctaagattt 37200  
 gaaactattt aactactag aagaaaacgt tagggaaatg ctccagaacc aatatttct 37260  
 tagtaagacc taaaaggcat aggcaagcaa agcaaaaatg gacaaatggg atcatgcca 37320  
 gctaagaacc ttctgcaaag caaacaacaa agtgaagaga caaccatca agtggggaa 37380  
 aataactgca aactactcat ctatcacaga attaatagcc ataatatata aggagctcaa 37440  
 acaatataat aggaaaataa tccaattaaa attgagcaaa agacctgaat gtttatttct 37500  
 caaaaaagac atacaaatgg ccaacaggaa tatggaaaaa tgcttaacat cactaatcat 37560  
 cagagaaatg catabaaaaa ctaggatgag gtataatctc atcccagttt aatggctt 37620  
 tatccaaaat acaggcaata atgaatgctg ataaagatgt ggagaaaagag aaacactcgt 37680  
 acactgtgg taggaatgtt tgtagtaca gcactgtgaa gaacagtata gagattcctt 37740  
 aaaaacctaa atatagagcc accatatgag ccagcaatcc cactcctgag taaatacc 37800  
 cccccaaaaa aaaaggaaat cagtatca gagtggtatc tgccctctca catttattgc 37860  
 agcaagattc acaattgtca agatatggta tcaacgtaaag tgcctcatg tggatagatg 37920  
 ggtttttttt attgctgca acatggatag aactggaaaga cattaagtga aataaaccag 37980  
 aagtcccttc attgctgca acatggatag aactggaaaga cattaagtga aataaaccag 38040  
 gcacagaaag acatttagtgtt gaatgttac actaatatgtt gggagctaa aaaaaaaaaa 38100

aagaactcat tgagatagaa ggtagaatga tggtaaccag agcctggaa agtagtgaa 38160  
 gagggggcag atgagtacaa aatctcccc ctcagattg gtacaaaaat acaattagaa 38220  
 agaaggaata aagtcttagtg tttggtagca caataggaa actatagttt ataacttact 38280  
 atatattca aaataactaa aagagtggaa ttggatgtt tctaacacaa agaaatgata 38340  
 aatacttgag gtgatggata ccccaattac catggttgt tacacattgt atgcttgat 38400  
 taaaaatgtca gacgtacctt ataattgtgt acaactatta tgaatccata ataataaaaa 38460  
 cgtatttaa aaagaaattt tgtgtccagt ttctgaatgt atttcattt taaagtaaaa 38520  
 cacacaggaa aagcagacat ttaagtcattt atactcctca ttgtcagcaa ccactacttc 38580  
 tggacacttc caggattta atgacacaca gaacacctca ctttaccct tcttatgctg 38640  
 atataggaga tggataagaa agtggacagt ctgtgctcc actcaactgtg ggtccactgt 38700  
 ttttggttt gggcaagggtt cgtctcaactg gctggagtcc attagctaag tggccatact 38760  
 ggcacagct caaagctta tcaagtgaaat ttctgttgta gttagccaaa tattttatgt 38820  
 tctttggttt tgaaaaat ggagactta agaaattggc attaaggata gttgttaaaa 38880  
 tcccaagctg gggagtgaag gagtacaagc acttttacca ttttaagcat gctttccctc 38940  
 gaccaatata gattagatgc tcaaagcaact taaatccttc ctgctgggtt ggctttaagc 39000  
 aaactcaaca gtggcagttt ttgcatttttca taaaaaaaaa aaaaaataca agtcattaa 39060  
 caattaaact ccttgcacca gaaatttagat ttctgccagt gaacaattta attcttcaact 39120  
 tcaaaataat ttctgttat cagctgctaa atgacctcaa aactaatcat gtgggaaaag 39180  
 tctcctgtca ggttaagaat cacacaacca tggcatgg tgaagacgtt gtcgttcata 39240  
 taaaatttca gtttaaatca atcccagctt caaactatgg ccaggtgaat atgcattgccc 39300  
 acttcttgc tctcttat tttttttttt tacattagct ttttagagttt ttgttcatgg aaccatata 39360  
 ttttcatctg tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 39420  
 ttctaatatt taaatcaaca ggcttaccc ttcttaaga cattttttttt tttttttttt 39480  
 ggggatggtt atgaacatgg gctttgggtt caaattcttc tcttctaccc cccagctgtt 39540  
 ttaacatgtt caattttttt tttttttttt tttttttttt tttttttttt tttttttttt 39600  
 ttgtcatgtt gtttggaaata attcaatagg atcacataca caaagtgc tttttttttt 39660  
 ttggaaactga gtaattttttt aatggcaggtt attactctttt tttttttttt tttttttttt 39720  
 ataagatatc aagcaaggta tggaaatattt ttatcagata ttcaattttt aagaacatca 39780



gcagaagctg aggtttgagt tttaacgtt gagctgaggt ttggggttt aggaggact 41580  
 ccagaaagcg gctgcaagca tccctattat ggctgggcta agggtctgct cacgcaggta 41640  
 tgtatcagca gtggaaaatc accaggggcc aggagtgggc ccagggataa tagggggtag 41700  
 tctctggcc agatggaaat gtgagttat caaggaccga agtggagatg aggggaagcc 41760  
 tcagaggcag aagctgggtc aaggtctt attaatcact tggacttctc tcagaaaatt 41820  
 tcattatgct aatatttcaa tactgggagc attttaact ctagctggga attttctca 41880  
 gtgagtttt ttagtgcattt cctctatttt aaagcccatc atatcttcca caattgtgcc 41940  
 gcatcttga gaataatgag tgctagctgg ataggtatg tgcacctgta gtcccaacta 42000  
 ctcaggagga tggcttgagc ccaggagttc aagtccagcc tgggcaacat agcagacccc 42060  
 cagctccaaa aacagaaaaga aaaaataata gttgtttct aaaagcagaa gtttagtgtt 42120  
 tattctgaaa tcccctcgcc attccagaat gcagacattt ttgttttaat acaatataca 42180  
 ttgttcctt gattctgtga aattgttgg aaaaattattt gggaaaactc aggaaaaata 42240  
 gggttgagat agatttctta aaaccaatgc aactaacaaa agtgctaaca atcctaataa 42300  
 aaattattaa atatatgtta aattgccacc aatcaaggaa ataatatacg aaatatagtt 42360  
 ctttaccac aaagaaggtg aaagtgttg gagagaaggg tgtaacaaaa ggttagaagtt 42420  
 actgagttat gaaaaaagag tcaaatgcag agattaatgt cttgctgcag taagcagtcc 42480  
 aaagacacaa catggagata aagtggcca aaagctaact tgaagtgaat gggcactatg 42540  
 tgcagtcctt tggtctctgt ggctagatgc ttagctgtgt taatgtgtt tacatgaact 42600  
 ttagggatc aaaaaattaa tggctggga aacacaaagt tacaaaggta acttccatgc 42660  
 cgtttgaaa tcattccctt atttgttaat gacatatgag gaatttagtgt tattatagaa 42720  
 actcacactg caacttagta cctaagacta aattgggtt tttattatca gtgagatctg 42780  
 atatattat ggtagggtgg tagagagtga tatttctcca cttataatgg gctatttacc 42840  
 ttggggtctt ggctaaatca ggttaaaatt tagtagtttgggtgggct ggggagtcgt 42900  
 ctttttaac agttcaggt aattccaagg ctgccactat ggggaccaca ctgaggattt 42960  
 ttcttgatt taattttaaa tcatgtttaa tttatttta ttttcttta tttatttat 43020  
 attaatttct ttattttat tttgtattgt tctctaacc tctgtatga agaggatttt 43080  
 tgaaaaatag actttggaaat caagtagaaac ttgggttgca tcatggctct tctatctgt 43140  
 agctgtgtaa ctttcagcaa gttgcccac ctctctaagg ctgagtttc ttatttgtaa 43200

aatcaggta attgtatcta ccacccagt gctgtgtgt ttatgtcatg caatgatgta 43260  
 tataaagcat ctagcatagt gtttagcatg ttatgtgatc tcagtaaata atggtaaag 43320  
 agcatcaactc ttttgcagg gctggagtgc agtagcaatc acagcttact ctagcctcga 43380  
 cctcctgtct cgagtgtatcc tcttgcgtca gcctcccaag tagctggac tacaggcatg 43440  
 caccaccatg cctggctaat tttcgtaga gacaaggctc caccacgttg cccaggctgg 43500  
 tctcaaaactc ctgagctcaa gcaaccctcc tacctctgcc tcccaaggtg ctgggattgt 43560  
 aggtgtgagc caccatgccc agctctaatac acacactcat ttgcctcaac atatttacta 43620  
 ttttttcct cctgaaatgt acttattctc tctttctga atcgatctt attctatgct 43680  
 gagttctatg gcaaaagctg agaattgttt cccaacatct ttgtttttt ttagttttt 43740  
 cacatggcac ccagctaaat gattacattt tccagtgatc cttgcataata ggtgtggcca 43800  
 agagaatatg ttttactcaa atttatgtg ggcattacta gaatataatct aaaaaatgga 43860  
 gcaacccccc ttctcattct ttatttgct gcttggata tagataaaat ggctggtgct 43920  
 ccagcagcat ttgggcaat gaagacaaag gataagctaa ggatagtaaa tcagtgatata 43980  
 ggacaaatct gagtacataa caactttgt aagctgtctc ataaacccgc aactggctac 44040  
 ctccagactt attttatgt aatgagaaat aaagtccgt cttgatttt ttcctgtta 44100  
 tatgtagctt actctaatacc tcactgatac aagcacttac ctggatcaaa gaaagatgaa 44160  
 atacaggggg cacaaaagt aatgtctgat ctctccggc gagtagttca accttctatg 44220  
 tcataatcagt tgtcttcac agagtactat ttataactt tttgagaga atttccctc 44280  
 ctataaactt cacttccaaa tgctttccct cccttattat tcttttattt tgatcactct 44340  
 ggtaagtctc ccacaaaatg tggtttccca agtctaatac cacattccat tcctcttaaa 44400  
 aacataaaact atggggaaaga gaatcaggat ctgtaaatca atatttgtat ggcaggat 44460  
 tctaataatgtct ttatatttca gagtcagtc cttcacagtt gaaaaactga atttacgtgt 44520  
 ttaatctcaa aacttgcagt tcccttaacat ctggagactt ttggcttcct gacagtatgc 44580  
 atttcctcta aaggcagcat ttcatttat ctgaaatggt tagtcttga taaatttaat 44640  
 gaatccctgga aaactctcta ttatctctc ccaagatgct gcccttaaaa caaaaaagca 44700  
 tctctctttg accatgtcaa gtccatacag ggcagttgtt gaacatctca ataaaatgat 44760  
 caggatatgt ggtgggtgga tagaatttc tagtagcac ctttcctt tgatacacta 44820  
 ttgagtagat gtaactatag ctttttc tgaatgttcc agaatcaatc actcctcatt 44880  
 ggctaaatgg catctgttat aaaactttt tcttatgaac tgtgcacttc ttgtctgaaa 44940

ttaactggat tcaatttatg tcagtgttac ttcaaccact gatagaattt taagttgcag 45000  
 aatataagtt tttgcactgg atgaactctt tgtcaactag atagtggaag gtcaggttaa 45060  
 aagggatgat atttagcaat tattattat ttttatatg aaaatggcat ggtggtttg 45120  
 ttttaaaga atggccttat gctaaaaga tacatactaa catagttaca ggtaaaatgg 45180  
 tacattatct gggatttact tcaaaataat ccccaagaag tagaaaaagg agtggatgta 45240  
 gttcaaaaca agattggctg tgggttata gttgttgaac ttgggtgata catatatgga 45300  
 gggtcatttt aatcctcttt ctaccttgt atatatctct cttaaccttt gtatttccat 45360  
 aaaaaaagga tttagaaaaag taagataatt agatggagat atgaatacta atttaataa 45420  
 ttaataatg ggaatcttca ataagcagat ttctaattgtat tcataagaata tttcaatcc 45480  
 gcatttggag ttatcagtg catattata tgcaaccatc cagttctatg agttattcat 45540  
 ctgatataatt caccaacaat gtatcaatag gaatacgatt tctcattcat acaaccagct 45600  
 attagcacac atgagtgagt ttatccacta actcactagg ggaagacaaa tcggggtgaa 45660  
 atctaattgc ttttctaagg aatgcattcg ttatttctta tggtcattcta tattttatata 45720  
 tgcttccta gtgccataat tcatttctt agcatagtga ggccatgagt gtcagtggaa 45780  
 aaagtgggtc atgatatctg ttatggctct aaagattcaa tgtcagtctt catctattca 45840  
 tcctgaggtg aactctgaca ctccctatgc ctgtttggta gccatacctc atttattcat 45900  
 tcatttaca gcatctactt aataattata aaatgcaccc atcttcaata tttaaaacc 45960  
 tttcccttg ctccatatcc actgcaccat ttatcaactc ccccttacag caaaagttct 46020  
 gaaagaaatg tccatgtttt ccctctctaa ttccctccct ttcataatct atctttttta 46080  
 ttacagtaca aaacacatag tataaagatc accattttaa ctgtttaaa ttgtacaatt 46140  
 cagggcgct taatacattt acaactttgt gttacagtca ccagcatcta gttccagcac 46200  
 atgttcatta ccccaaagg gaaccctcta cccattaagc agtcccttcc catttcctcc 46260  
 tccctgttagc ccctggtagc tactttctta tggattgatc tactgagttt atttcatata 46320  
 aatcgaatca tacagcatgt ggtttctgt gtctgaattt ttcaattgg tgatatgg 46380  
 tggatcagtg tccctgcccc aatcccatgt caaattgtaa tccccagtgt tagaggagg 46440  
 gcctgctggg gggtgattgg attgtgaggg tgcatttccc cttgttggtt ctcatgatag 46500  
 tgagtgaatt ctcattatat ctgggtgttt aaaaatgtgt agcaactcac ctttgctct 46560  
 ctccctcctg ctccagccac gtaagatgtg cctgcttccc catcacccatc cgccatgact 46620

gaaagttcc caaggcctcc ccagaagcc a gtagccaag tagatgctgc catgcttcct 46680  
 gtacagcctg cagaaccgtg agcta atctt ctttcttta ttaattaccc agtttcagg 46740  
 tatttcttta tagcaatgca agagtggact aatacactt a gtgtaatgtt ttttagattc 46800  
 atccacattt cagcatgtgc agcatgctgc tctaaaatata gtaacattt agtttcatcc 46860  
 acactgaagc attgtttttt catggctgaa taatattcca ttaaatggat ctaccacatt 46920  
 ttgttatgc attcattaat tcatggacat ttgcgttgtt tctactttt atctactatg 46980  
 aatagtgtt g ctaggaacat ttgtgtacaa aaattttgt ttgactatct gtttcagtt 47040  
 cttttggta tataatctggg agtaaaattt c t g t a t c a t a t g c c a a t t t a a c t 47100  
 tattgcagaa cagccaaact ctttctata gcgcgtgaacc atttacatt ccattaataa 47160  
 tgtatcagg 47220  
 cttccagttt tcacatgctc accaactttt attacttct gttttttaaa 47220  
 attaaatcca tctcaggc 47280  
 ggtgcggtgg ctcacgcctg taatcccagc actttggag 47280  
 gccgaggtgg gtagatcacc tgaggtctgg agttttagac cagcctggcc cacatggta 47340  
 aaccctgtct ctactaaaaa tacaaaaattt agccgggcat ggtgacacag cctgtatcc 47400  
 cagctatttgg gaggctgag gcaggagaat cacttgaacc cgggaggcgg aggttgcagc 47460  
 cagctgagat tgagccactg cactccagcc tggatgacag agttagactc catctaaaa 47520  
 aaaaaaaaaa tataatata tataatata taatatccat ctcagtggat gtaaaatgg 47580  
 atctcatttgg gtttttagt tgcattttcc aatgactga ataatgttga gcatctttc 47640  
 atgtgcttat tggccrttgg tatgtcttct atagaaatata gtctatgcaaa gtcctttgcc 47700  
 cattttaat tgggttggta gtcattttat tattgagatg tatgagttt taatatgtt 47760  
 aaaatgttag acccctatca gattccttataa caaatatattt atttgc 47820  
 ctattatgtca ttcttgagaa agaatagcac aaactaaaaa aattttaaata ttctgaattc 47880  
 aattgtgtgg gttgaaagta tataatgtt aagagtagt tgcgtatatg ctcactgtt 47940  
 gttagaagtaa aaaaatatttca aactcttga gctgtaaagca acagtggagt ctacttctgg 48000  
 tatccaaaca cttccccaaa cattaaagca tttagatgtt caatttaattt ctcaggctga 48060  
 tcttcaaaat catgtcttgg agacacaattt aataatcatg ttaattgggtt taaggaagtc 48120  
 taccctaata gaagttcaat ttcttgaga cttttctgat ttttggatct ttgc 48180  
 atatatgtata attaattatgtt gtcgtatatttgcctt acatgcctga cattccacca 48240  
 tataatgtt aatgcagttaa gtcctgaca tttgtgacaa aaaagaaaacc 48300  
 ccatgcagaa ttccatgaa ctccttagaa atgttgcgtc agtcaggta cagtcaggag 48360

atagaaaacta ctcagtaact tgaatggaa attcaaata taaagaatta ttataatgaa 48420  
 ctaagaatta attaataata ggattaacta agaagcaata aggagaargc tacagaatac 48480  
 aatagtagca gatattggaa gtaactatta cctctgttagc tgaggccaag tacccattga 48540  
 gggaaaagac ttccaaggag gccaacattg agatctaaac tcctatatgg agatggtgt 48600  
 gcccagttca tggcagataa atttgctgag gtcccaaagg tcaggggtgg ctggaaactg 48660  
 cctgttgggg ttaccagtga actaactggg aatcaggcct ctggaatgct ggtgaaactc 48720  
 actggaaagc caccctctaa ggagctaacaa agactttaca ggggtgctgg caaaacttgc 48780  
 tggagcatga atgccactgg gtgttccaca cactgcttagc tgtcaagtgc tatgggagca 48840  
 aaaaggcaca caaaaatcag gaaaagtccc ttccctcctgc aatgtccctc ttctgcccctc 48900  
 tgttgcacaa gcctaacatt gcaccctctg aaaaaagaga aaccttacg tagtccagct 48960  
 cctgtatcac aaagcaagac aaaggtaat ctgaaactgg gatgctataa attgataagt 49020  
 ggcacagata gtgatttggg attctttag ggaataatcc agmaaaaaga tggtttatga 49080  
 ggaaagtttc agaagtgggtt atttacacag ggttagcagtg tgattactta gaagacaaaa 49140  
 gcttaataat ggctaaacca gaaaacctgg tttaaattaa acaattaaaa ttattttaat 49200  
 ttcaatgatc taattaaaaat aaaaaacaga taaacagata tggtaggat aatctgaatc 49260  
 tatgagccaa aaaatctcca aagcagagaa ttctcttaaa gcagatccca aagacaagg 49320  
 caaaggtagg tcctatacta tcaagtgaga attgatacca catgtcctag gtaagttgtt 49380  
 ctatgaaatg acgaattgca gatataagca agcaagtgac ttatggct tgttttgtt 49440  
 tgggctgctg tggtaagga gccatcaa at cagagtgggtt atattttga ggatcttggaa 49500  
 aaaataaaaaa ttccctcctt tagaagtaca tcaatagaag tacataagtt aggtgctgca 49560  
 ttcactgcta ttactaaaaa aagaaaagaa gagaaaaaga aatacatctg ttaggaatgc 49620  
 ttttgctgt gtgtataaaa tgacctgaat aacagagatt tcagaaataa agaataaaca 49680  
 cttttttttt tctttttaga tggagtctca ctgtgttgcc caggctagag tgcagtggca 49740  
 tgatcttggc tcactgcagc ctccaaactta tgggttcaag tgattctcct gcctcagcct 49800  
 tcccagtagc tgggactata ggtgcacacc accacacccg gctaatttc gtatttttag 49860  
 tagagacagg gttttgccat attggccagg cttatcttga actcctgacc tcagatgatc 49920  
 tgctgccttgc ctccaaatgtgtggat tacaggtgtg agccactgctg tggactaaaa 49980  
 acagttataa atctcatata acaaattgatc cagaggaagc agttccttga tttcttcaaa 50040

gaccacaccc ttttgcacatct ttctgcctcca gatcccttag actactgtct tggcgttca 50100  
 tggacagaac ttgggttttc tcgttcttcc accattnaga caagaagaag gaagaaagga 50160  
 gttaatatgt gcatctgcac ttatgagtat caagctgtt gacagatatt aattgaacaa 50220  
 tcacgtgtgt gtgtgtgmgg gggggcagtg tgtctggctg tggaatttaa taatttagtca 50280  
 aagcatgtac aattttggcc cttagcaaa tcttacagat ccaaacatga gacttcgtcc 50340  
 tagaaatttc ttttccaccc tatacatgcc tgattacaca gagggtcatt ccccaacccc 50400  
 tgcacactca tagcaattct tctgcctcga atcttcctgg tgcattctgg gagttatcct 50460  
 acttattttat acttactaca taatatattt aggtgacat tttatgttaac agatttttt 50520  
 ctggtgccat aattctctaa tataaaatcc taaaaaacat aatataatattt ggttaacaaag 50580  
 attttattct ctttctctag tctccctctc tgctaaatct aataaatgtat taaataatag 50640  
 gaaactgcag ttcttaaagg gcagtctctt tgggtttagg atctgatttc cattttagca 50700  
 gtggaaagatt taatgttgca attgcaaaga gagaatctct cttttattaa cttttataca 50760  
 atttctcatt atctaattta taactttgaa gggactattc attccttctg tactttttt 50820  
 gaccactttt taaaaactta tggaaataact ctttaaataaa atagaaaaaa cacagggtca 50880  
 agtgcagtgg ctcatgcctg taatcccagc actttgaaag gctgaggctg aggctggtgg 50940  
 atcacttaag ctcaggagat cgagaccagc ctgggcaatg tggcaaaacc ccatctccac 51000  
 caaaaataca aatgaacaa acaaataagcc ggttgtggtg gtgcattgcct gtggtcccag 51060  
 ctactcagga ggctgagggtg gaaggattgc ttgagcctgg gaggcagagg ctatagttag 51120  
 ctgagattgc actcacaatg aaacagtgtg ataaaagtac aaaaattaa cccatgtatt 51180  
 gtttaataac tttgcattgc taactttcaa atatttctga aagaaaacat atrgggccta 51240  
 ttcatcctct gctctctcca acttcatttgc ctttctacat tgtgaaatct cctgtttcca 51300  
 gatttatc ttcagagaag cagcctgtcc ttggcttgc tggtttagt tatgtaaata 51360  
 atggatagaa ttttccctgt ccatgtttt tctgagatgg ttttctcaaa aaaatttcca 51420  
 tttcaaaagc aaactccaca aatacacaaa aaataactaa acatggaaag aggttttagtt 51480  
 gccttagatt gtgcaaaaga cttagaagtaa ccggccagatt ctcagccctt gattgtccca 51540  
 aatcacacgt catcaactga ctaaccagaa aaggaaaaca agccagttgc agatgaaaga 51600  
 agatttgatt ctaatacaga ttgttaaccc acaatgactg ttttataagc aaagagtac 51660  
 ttttgcactt gatattgagt tttccactgc aatgtttctt gaaaattcct aaaatatcat 51720  
 acattataca ttatgcacaa cactcaacta ttgagcggca agattttattt gttttggga 51780

acactcttaa caggcattgg taggaaatgc aaagaattcc agaaacagag ctggactgga 51840  
 aagaacacat ttatcattag ttccataaaat ctatgttct taggattaga agaggaattt 51900  
 cttggactga gtaggttta aatattctga gccattggca gagggagcta ggattgttct 51960  
 gtgatgttgt gaaatacata tttgatcttc attccatttc ctggagtaca gctcctaaaa 52020  
 tccttggaat ctcctgagtg ataagagttt ttttcttg tatgttactg agataacagt 52080  
 ggctaagagc acctaggtag tttcaggatg ggggtcaactg gaaagaccaa ggcattgatta 52140  
 gagagttggg agtttcagcc tcccccaaccc tactccccaa tccctgcaag cagcagagaa 52200  
 aggctgaagg ttaagttgat caccaatggc taataatgta atcaatcatg cctatgtaat 52260  
 gaagcctcca taaaaaccca aaagaatagt gttcagaaag gcttctggat tgctgaacar 52320  
 gtggaggtgt ctggaggggtg atatgcccac agagggcatg gaaatttcac tttcctttcc 52380  
 acatacatttgc ccctatgaat gtactctgtc tggctattca tccatatctt ttgtatatac 52440  
 ttacagttca ttttgggtgt gggatcatat aaacttgggc ttgacttatt gttgtcattt 52500  
 tattttctg atactttgtt ttcttgggtt gaaatggggta caataactt tattagttgg 52560  
 ggctcagttg taggtgacag gaaacattag gataatcaga aaagaaaagag gttaatcatg 52620  
 gggaaagagct ggtttaggc tatgtctctg ggattgactt ccagaatgtc aaccaagaac 52680  
 cagctcacca aagaaagggc tacctctgca accttcagaa agctggggag tcaggaagac 52740  
 actatcccaa actcttgatt ccagcgtcag accaccttag ctatgaactg gagtaagaag 52800  
 ctgccaccag cattatagac tcagagtcac atggtgacata caaatccatt caagcaaaat 52860  
 gtatgtcact ggcattcccta ctttccttcc ttttattttac tgattaatgc aatacatatt 52920  
 tactgaatttgc tagtaaaagaa gtaaaatatg taatacatta gaaagagata aacgtaatac 52980  
 attagaaaagg gataaatgca atgacgaaaa gtatgttagg aaatgggatt acagaaaatt 53040  
 gacrgcatcg gccttagtct gttcgtgttgc ctataaagga atacccgagg cttgataatt 53100  
 tatataatttgc aaaaagaggt ttatggct catggttctg caggttgc aagaagcatg 53160  
 atgtcagcat ttactttttgg tgagagtttc agactacttc cacttgcggc agaaggagaa 53220  
 gtggagctgg catgtacaga gatcacatgg tgagaaaaaa agtgagagag aaagaaggag 53280  
 gtgtcaggct ctttttaaca accagctgtt gtaggaacta atagagcgag aactcactca 53340  
 ttaccttagaa ctcactcatt acctcaagga tggcaccaag ccattcatga tggatccacc 53400  
 tccatgactc aaacccctcc cactaggccc caccctgaac attggggatt atatttcaac 53460

atgagggtta gagaggtcaa gtatccaaac catagcagag tcaaagaaga cctccttcag 53520  
 aaggtgatat ttatgtgaat atctgaagaa ggtgagagga cgaaccatgt gagtcttag 53580  
 gggagaagtg tccaggagag ggaggagaaa atgcaaaggc tctgagacag gagattccct 53640  
 ggaaggcaag caaaagcaaa gaggccagca tggaaggagt ggagtgagtg aggaaatgag 53700  
 cctgctgtca gaaattcaca ttgattcaa agtagaaatt tcctaagtaa ctattgcttg 53760  
 gtttctata tagacagtgt ataagtattt taaactaaaa tattcaaaga ttttgatata 53820  
 atttaaatga atatatgctc cttaaatga aaggacagag ctaccaatat cactatattt 53880  
 gaagctactg ttatttaaa taataatccg tgctattaac aatgtcatta tctggtttgg 53940  
 ttttcttt tcctctttg gagacagggt ctcactctgt tgctcagggt ggagtgcagt 54000  
 ggcataatca tggctacta caacctccac ctccctccca cctcagcctc ccaaatacgct 54060  
 gggactacag gcacatgtta ccacacccag atagtattt ttgtatTTTT tttttagag 54120  
 acagggttt gtcataattac ccagggtggt cttgaactct tgagctcaag caatccaccc 54180  
 gcttagcct cctgaagtgc tgggattaca ggcatgagtc accatgcctg gcctttttc 54240  
 cttttttat aagactttt ttaatcataa aaaaaagtct gtcttgatg tgacttttc 54300  
 atgtagaatt aatgagttac atgattgact tctaccttt gaaagattct tacaggcttc 54360  
 atttttataa tagcacagtt ataatagctg aaaaaaatct gagtatagct tgtcagattc 54420  
 atcactgaaa tatgtttaa gggcgaa taataagttag gctggtttg acacactgct 54480  
 tttttcaat ggaaggctaa aagtgagaaa ataaactcat ttctgttagga gatagagatt 54540  
 tacatttgtt ttctttgac aaaatactcc attctcacac attatacacc atttaagaa 54600  
 gattagtatt tgtctgagac aaagtgatct tagactttca gtttaatgg tggcatagaa 54660  
 gcaagctggc cttactaccc caccccttg ccagaaaacc aaaaacaaat atacagcaac 54720  
 aacccagaat caaatatgag gatgagacag atcctgggaa cacagagaaa tgagagtt 54780  
 ttgagcagat ggtgggagaa tcagacttac acatccatga cacccatcc ccccatctg 54840  
 cctggcaact agcacctgga aaatcttctc caactcatgg tttctacaag ggaaggagt 54900  
 agattgagat ggcacccag ctttctacc atctggata tcttggagg agacctgtta 54960  
 ttgtcttaac ccaaggaaag cactgtggct gcctgaaggg agaaacttca cagaggacag 55020  
 gtgaagacaa aggagggaaag tggaactacc acccccagcc ctggaaactc tgctctgcaa 55080  
 cttggcaaaa gaagacatca aatcagaatg gttgttcagg agcatcacac catagaaggt 55140  
 acgtttcata gtttccttgg gtgtaaactc ctagctagcc ttcttaacagt gccaggtccc 55200

tttaggacct caccattca aaacggacat cactctgatc atttacccaa gccaaggtga 55260  
 acctggactt aagacacacc tagggccaaa aagaaggctg caacatagtg gtaaagattt 55320  
 tctaggccaa tatatccact aaaaaaaca aacaaggctg tcagaggaaa tttgaaaaaa 55380  
 taattaatcc ttcaatacaa aggcatagat gtatccagga ggaaatggaa tgacatttc 55440  
 aaagtgttca aagaaaagaa aatctgccat ccaagaatat tgtgcccagc caaattattc 55500  
 ttcaactatg aaagagagat aaagtcttc ccagacaagc aaaagtttag agaattcacc 55560  
 accagcagat ctgtcttaca agaaatgctg aagggagatc ttcagtcgt aatagaaaaa 55620  
 aaaataatgc acaaaaagaa aactttcaa ggtgtaaaac ccactggtag aattaagtac 55680  
 gtagacaaac caagaatact ctattcctat aatggtggtg tgcaatctac tcacaactct 55740  
 gataataaag cccaaaagac aaatctgtca aaaacaataa tagctacagc aacttattaa 55800  
 aagatatgga atgtaaaaaa tgtaaattga gacaactaaa actcaaaata tgagggtgat 55860  
 agagttaaag tgttagattt ttcgtatgtg tgtttttgc ctttatttct ggtctttatt 55920  
 gtgtgatcta aggtaaatgt catctgttta aaataacttg tgatatctat ggttttttt 55980  
 tgtaaggcctc atggtaacca tgcaaaaacc tataatagat tcacccaaaa taaaaatgaa 56040  
 gaaattaaaa catactacca gggaaaatca cttaaacatg gaaaaaaaaa aagactgaga 56100  
 aaggaagaca gtagtctcaa aacaaccaga aaataggcaa taaaatggca gtagtaagtc 56160  
 cttacttatac aataaacactg actataaatg gtctcaattc tccaaattaaa agtcataaag 56220  
 tgactgaatt gataaagaaa caagacccaa ctatatgctg cttcaagaa actcacttca 56280  
 cctataaagg cacacataag ctgaaagtga aggggtggaa aaaatattcc atgcaactgg 56340  
 aaaccaataa aaagcaaaag tagctacact tataacagat aaactagagt aaaaagctaa 56400  
 ggttataaaa aatcacgaag aagttcacta tataatgata aaggagtcaa ttggcaaga 56460  
 ggtatataaa attataaata tctatgcacc taacatcaga gcttccaagt atataaagca 56520  
 gatattaata gatctaaagg aagagataca ctgctgtata ataataatag gatatttaac 56580  
 atctcactct cagtaatgga cagatcatcc agacagaaaa tcaacaaaga agcaccatgg 56640  
 tttaactata taccagatca aataggcctg actgaaattt atagaacatt tcacccaaact 56700  
 gctacagaat acacattctt ctcatcagca catggcacat cctccaggat agaccatag 56760  
 tttaggacaca acgcaagtct gaacaaatta aaaaatatgt aaattgtatc aagtgtttt 56820  
 ttctgaccat aatgaaataa aactagaaat cagtagcaag agggacctca gaaaatacaa 56880

aaacacatga aaattaaaca acatgctcct gaaaaaccaa tgggtcaatg agaaaattaa 56940  
gaaggaaatt tttaaattt ctc当地cca ataaaaatgg aaatacaaca tatcaaaatc 57000  
tgtggatac atcaaaaaca gtc当地aggg agaagttat ggc当地aaat acatttatca 57060  
aaaagtagga agtcttcaaa tacacaacct aacagtgac ct当地agaaac tggaaaagca 57120  
agaagaaacc aagccaaaaa tc当地tagaag gaaataaata atgaagatca gagccaaaat 57180  
aaataaaatt gagacaaaat ttacagaaga tagatgaaac aagaagttag tttttgaaa 57240  
aggaaattga ctaaccttta gctagactga gaaaaaaaaga agacctaaat aaataaattc 57300  
agtaatgaaa aaggagacat aataaatgag acttc当地aaa tacaaagaat ct当地ggacag 57360  
tattatgaac aactatatac caacaaattt gaaaacccag aagaaatgga caaatatctg 57420  
gacatgtaca attgatgaat attgaactac gaagaaatag aaaacctcaa caaaccagta 57480  
tttagtaatg agatcaaagg cataataaaa aacctctcat caataaaaat tt当地agacct 57540  
gatggcttca ct当地gtgaatt tt当地caaaca tt当地aaagata ataaactaac accaattctt 57600  
ctcaaaactct tcaaaaaaaac tgaagaggaa ggaacacttc cagactcatt ct当地gaggcc 57660  
agcattatgc tggaaaaccaaa accagacaag tacacaagaa gaaaaaaaata aaattacagg 57720  
ccaatatcac ttagtaacat aaatgcacaa aatcctgaac aaaatactag caaaaacaatt 57780  
tcaacaacaa tcaaaaaagat cattcatctt gatcaagtgg gattattctt gggatgcaag 57840  
gatggctcaa catatgc当地 ctaataagtg tgacacatca cattcacaga atcaagaaca 57900  
aaaaccgtat ggttatttca atagatgcca aaaaagcatg tgataaaatt cagcattctt 57960  
tatgatgaaa atcctcatca gaatggat 3aaaaggaaaca cacctaaaa taataaaggc 58020  
catatatgac aaacccatgg ctaacattgt actgaatgga gaaacattga aggcccttcc 58080  
tcttaaggaaat ggaacaaaca caaggatgcc cactttcacc acttttttc aacataaac 58140  
tggaaagtctt gactggaatg actaggcaaa aaaaaaaaaaaa aaaaaaaaaatc agtaaatttg 58200  
caggatacaa aattaacata taaaatcag cagcatttat atatacaaata agtaaacaat 58260  
ctgaaaaaga tattaggaag gtaattgcat ttacaatagc tacaaaata tcaaatacc 58320  
aggaatcaat ctaaccaaag aagtgc当地 tcaatacaag gaaaactata aaattctgaa 58380  
aagaaatgaa attaatataa taattaatat tggtaaattt gcaataatac ccaagcaat 58440  
gcacagattc aatgcaatcc atatacaaata accaatgaca ttcttc当地ag agacagaaaa 58500  
aaaaattcttta taatgtatct ggaaccacaa aagaccctca atagccagg taataactgag 58560  
caaaaagaac aaaactgaaag gtatcacact acctgatttc aaagcttact ataaatttt 58620

agtaacaaaa acatcatggc actcacataa aaatagatac atacaacaac ggaacagaat 58680  
 agagaatcca gatatagata cacacattt cagccactc atcttgata aaggcaccaa 58740  
 gaaataaaat ggagaaggaa cagtctttc agtaagtagt gctagaaaac tggatatcca 58800  
 tatgcagaag aatcaaacta gacctctatc tctcactata tgcaaaaatt cagtcaatat 58860  
 ggattaaaca cttaaatcta agacctaaaa ccatgaaact actagaaaga aacattgggg 58920  
 gaaaatctcc aggacactgg cctggcaaa gtttactct gtaagatctc aaaagcacaa 58980  
 gtaaccaaag caaaaataga caaatggat tacatcaagc tacaaggctt ctgcacagca 59040  
 gagggaaacaa tcaacaaagt gaagagacaa cttacagaat gggagaaaaat atttgcacac 59100  
 tatccatctg agaaggtatt aataaccaga acatataaga agctcaaact atttaatagc 59160  
 aaaaaaatta ataaaaatg ggcaaaagat tggtattaac atttctcaaa agaagacata 59220  
 caaatggcca acagttacat gaaaaatat tcagcattt atatggttt gctgtgtccc 59280  
 caccaaaatc tcaacttgaa ttgtatctcc cagaagtcc acgtgtgtg ggagagaccc 59340  
 aaaataccca gggggaggta attgaatcat gggggctggc ctttccatg ctattctcat 59400  
 gatagtgaat aagtcttggc agaactaatg gtttatcag gggtttctac tttgcttct 59460  
 tcattttctt cttgctgcca ctatgtaaaa agtgcctttt gcctcctgcc atgattctga 59520  
 ggcctcccag ccatgtggaa ctgtaagtcc aattaaaccc tttttgttt ccagtttgg 59580  
 gtatgtctt atcagcagca tgaaaatgaa ctaatatggt aaattggtac cagtagagtg 59640  
 gggcggtgct gaaaagatac ccaaaaatgt ggaagcgact taggaactgg gtaacaagca 59700  
 gaggttggaa cagtttggag ggctcagaaa aagacaggaa aatgtggaa agtttggAAC 59760  
 ttccttagaga cttgctgaat gttttgtatg aaaaatgctga tagtgacacg aaaaataagg 59820  
 tccaggctga gtttgcctca gatggagatg aggaacttgc tggactgg agccaagggtg 59880  
 actcctgtta tgttttagca aagagactgg cagggttttgc cccctgcctt aaagatttgc 59940  
 ggaacttgc acttgagaaa gatgatttag ggtatctggc ggaaaaaatg tctaagcagc 60000  
 aaagcattca agatgtgact tggcgctgt taaaagcatt cagtttgcgaa agggaaacag 60060  
 agcatagaag ttggaaaaat ttccagcctg acaatgtgat agaaaagaaa aacccatttt 60120  
 ctggagagaa attcaagcca gctacagaaa tttgcataag tagcaaggag cctaattgcta 60180  
 atcccccaaga ccatggggaa aacgtctcca ggtcatgtca cagaccttca tggcagcctc 60240  
 tcccatcaca ggcccagaag cctaggagaa agaagtgttt ttgtggctg ggcccaggc 60300



gttctcactc atatgtgaga actaaaagag tggatctcat gaagatagaa gattgttgt 62100  
 taccaaaggc caggaagagt gggagggaga agggttgaa gggaaaaaaa gaatataaat 62160  
 ggagccatta tcacttaatt gtacacttaa aaatggtaag aatggtaat tttatatgta 62220  
 tatttatct caataaaaac cccacaaaat tgcaaaaattt attacttgt aattataagc 62280  
 atatactagc cttaggatta gaaggaatac atggtggtgg gttgaggaga aaactatgcc 62340  
 aaagacgtgt ctaagagagc agtctaaaa aaggatttct taaccttgc attgtcatta 62400  
 ggggtggaca atttctgtt gtgggatgct atcttccgccc taggatgttt attagcagta 62460  
 atcctggtat ttacgtgcta gatgccagta acatctcccc tcagccctcc acccctgccc 62520  
 tgccctgatg taataaccaa aaatgtctct agacattgct aaatatctcc tgggggcaaa 62580  
 attattcagg gctgagaacc actaagttgg agtcagaaga gtgaaacaat ttaaaaattt 62640  
 agctgggtgt ggtggtgcat gtctgttagtt ccagctactc agcattgctt gagcccagta 62700  
 gtttgaggct agacttggca acagctctgc atgctgtata gagtagaga ccctgaaaaa 62760  
 agaaagaatg aaagaacgaa agaaagcaag aaagaaagaa aaaagaaaaa aattgatcta 62820  
 atcttgaat gtgaaggaga catctcactg cacagaaaca tagagaacaa ctgtttgtaa 62880  
 taattattag ttaatataat atttctttg ctagattgta agatgcacga ggacagagac 62940  
 tgtakctctt attttataaa tcagatcata atctgaaagt tagtcgacag gtgtttattt 63000  
 cattgctatg ggtctatcaa tgggttatgt gcatttgagg caggataggt agtcaaggaa 63060  
 gtgaccatgt tgccaggacg cagtatcgatgt ggtggccata caaccaacac aggcctcagc 63120  
 gttcgcagta taattgagct cattcaagca aagctatctg cgggtgggac ttttccttct 63180  
 agagagcatg tgcacttgga ttttaccagt cctcaaatttgc ggcattttgtt catttcaata 63240  
 gtgaaaaata cactcctggg tggagatttc agatgctaattt gagacacacg atgcataac 63300  
 aagcatgtgc agctactgtc catgtgcacc cagaggacca cccagaacat acctactagt 63360  
 aacgcctctt cccaccttct tatgaatttat tatgtaaaac tccctataaag ggagtctccc 63420  
 tagtgcactgt ctttgcgttgc tcatccttgc gggcagccca ccctgaatcc tctctcttc 63480  
 aggggtgtcct gtctattctg tacctacctt tcaaaaattt cttttcttt tgcaataaat 63540  
 cactgtatgc tgcaccttct ttgccaggatg ctcttattta aattctttta aactaaggag 63600  
 acaagaactg aggtctcaca gaaaccatca atatttgga aataaaagag aggattnaa 63660  
 actgagtctg ttcttaaagt gtttcatggc ttatcttcta attgcttact atacagttagc 63720

tctttctgt gctactagat aacaaaacct atagtactaa aaaccatgtt cttttcaaa 63780  
 gaatgcagaa aagagtatga agtagaggaa gtagaggagg aagtagaatt aaagttgatt 63840  
 cttgatgaat ggactagttt tcagtgggtg gaagaaaaaa atgaatgagg gattccggat 63900  
 gtggtaaca gcataagcag agctattcag ttaggaatta aaatcattt ggtgttgaga 63960  
 gcaagcaact atttttttt ctcgagttact tactatgtgt cagttactct gtaactgg 64020  
 atgtatatat tatttcattt ataggactca gccagtgaag gcatgaaagt gttagaatca 64080  
 ttttaatgga cttgattcaa atgagggtgg ggaagtataa gtaaaagtca atccaagata 64140  
 ttgtctcagc tcctggaaca gtgggtccat ttagggcatg gctgcttggaa 64200  
 aaatttattt gtaataggaa ttttctttt gcattttaga gctaaaaggg ggccttcaat 64260  
 gtcatatttgc aatctggcaa caaaacaacc aaaaaagata tcctctatgt aataggaaat 64320  
 atgagatcag aatccctgtg agaggacaca ggtaaagatg taagtttggaa 64380  
 cacgggagtg gatgaaatgg ctaaatgggt aaatcaagag aagagctgct tgccaaaatg 64440  
 agagcctcag tggacactac ctattagaac acctgacaac aaagagaaga tgaagaagaa 64500  
 atcagagagg aaggaggaga aacagggaaag tacagygttg aaaaatattt agaaaggaaa 64560  
 tgatacatga ttattaggat ttcctaccac tctgagatgt aaaaagaggc 64620  
 aaagtcaatttgc ttcaggatcaa gaagcctggc tatcttcattt cagagaatgg aagagctcag 64680  
 cctcacctt caattctcat tggctctgaa acatcatagg ggtgggggtgg 64740  
 ataagttact ttgttagctttt ttttcttattt ttttgcattt ttttgcattt gtaaataattt 64800  
 ttacagaaat ataacgatataat ttttgcattt ttttgcattt ttttgcattt gtaaataattt 64860  
 ggaaggataa gacccacaat ggaatccaac gtagatttagt aatgaagttc tttaaacttg 64920  
 tccagoatga caatgatcta gagcaacaga aatgtcttct tggattcattt ccatgcgagc 64980  
 taacttggcc tccrtgctcc tattccattt ttcctagaac ataacactca ttgtccatgc 65040  
 acttgcgttc ccaatctact caggaggctt ttcctcccaa tatctacaag gcttactaac 65100  
 tcactcttctt cagatcttgc tcaaatttttgc tccatcaaa tcagccttc ctaaccactc 65160  
 tttcgaatac agtaactacc attttaccc tagacactcc ttactctcct tacygtgctc 65220  
 aaggaaatta ggatagactt attaccatca gatagactat gcattcttatttattatgt 65280  
 ttattgtctg atctccctt acccctgtgc acataccagc aaattatctc tatcatgatg 65340  
 gagatctttt attttataact tgctgctaca tccccatgt tctagaacag ttgcaggtac 65400  
 tcaatagatg tggaatgaat ggatgaaaag gcactatctt tataatacmtg ttagtgggtt 65460

aggacagatg actttgaagc aatgtgcct gggttcaat cctggcagta ccactgattc 65520  
 tagttgttg gaaggtagt taacttctgt gtacttcatt tttattgtct ctaaaaaata 65580  
 ccataataaa aatattgtaa gattgtttaa agaattaaat gaattatctc atgtaaagaa 65640  
 ctgaggacag tgccctggta agagttgttgc ctctgttaat gttagctatc actattttt 65700  
 tttttttttt gagacggagt cttgcctgt cacccaggct ggagtgcaat agtgcggct 65760  
 cggctcactg caacctctgc ctcccagatt caagcaattc tcctgcttca gcctcctgag 65820  
 tagctggac tacaggtgcg tgccagcaca cccagctaat ttttgtattt ttagtcgaga 65880  
 tgaggtttca ctatgttggc caggctgtc tctaactcct gacttcctga tctgcccacc 65940  
 tcggcctctc aaagtgctgg aattacaggt gtcagccact gcgcggcagcc ttagctatca 66000  
 ctattaatgt gtttctgtaa tgtgactgaa aagtgttagta ctttcaaattc tggacgtata 66060  
 aatacatgct atccagaggt cagaaggaa gggattgttgc gggccagaga ggcagtgagg 66120  
 agctataatgt gactgaatgc aagaatggtc accaccaatt cttctaccc taaaacatgc 66180  
 catttctctg tcaagaggta gagtctattt ctccctttcc tttaaatctg gtctggcaaa 66240  
 gagtgcaatg gaagtgtatgt tttgagactt ccaaggaaga tcataacaaa cttcagcatc 66300  
 ctatggggcc tctttagaaatg ctccaagtaa agccagtcac tatctaaaaa gtttaactac 66360  
 tgtgaaccac cattatgtaa agacactcaa actagctatg tagtaaaacc atatggagag 66420  
 agagtatgc aggtcagccc ctagctgttc cagccattcc agtcaaagaa caaggaatgt 66480  
 gagcaaaaaa gacatcttgg acattccagc ctcagcagat gccataggaa aaaaaatcaa 66540  
 ggccactgtc ttatggcccc aatttagtca cctcatccct cttcagccat ttgtgctacc 66600  
 ctagatgagg gcccagatat tttggagcag acataagcca tatccattt ccccaacca 66660  
 aattttat acagagaatt gtgagcataa cagactgatt tttaaatgca attgtatccc 66720  
 agggcagttt gttacacagc aacatgtaat gggagctgga gacattcagt ttgcagaaat 66780  
 taggaaaact ttaaaatgct ctttatatta tgaaagcaat aataatgaag atcatgataa 66840  
 tgacaacaac actggtaggc atattttattt aaaggtctag tataatcttgg gtactcta 66900  
 tactaaattt acttcttata agttttagta gtgtatgtgt gatggtaat actcagtgtc 66960  
 aacttcattt gattgaagga tgcaaagtat tgatccttgg tttgtctgtg aggggtttgc 67020  
 caaaggagat taacatttga ttccggctt gggaaaggca gaccacccct taatctgggt 67080  
 aggcacaatc taatcagctg ccagcatggc taggataaca gcaggcagaa gaatgtgaaa 67140

agactacatc tttctccgt gctggattct tcctgccctt gaacaccaga ctacaagttc 67200  
 ttcagccttg ggacttggac tgacttcctt gctccccagc ctattgtggg acgttgtatc 67260  
 tatgtgagtt aatactactt aataaaacaaa ctccccttca tatatatata tatgtatatc 67320  
 ttatcagttc tgtccctcta gagaaccctg actaatacaa tatgttaatg tagttagaca 67380  
 agtttgcaca ttgcataatg gtgatggaat ctatccaacc acaactcatt ttgcttgc 67440  
 cccccaccact cacatgtgag gggcttgc 67500  
 tttttttttt gtttctttt ttttttgaga tggagttct ctcttattgc ctacgctgga 67560  
 gtgcaatggc acgatctcg 67620  
 tgcctcagcc tcctgtgttag ctgggattac aggcatgtgc cacaatgcct ggacaatttt 67680  
 tttttgtaa tttaataga gacagggttt ctccatgttg gtcaggctgg tctcaaactc 67740  
 ccgaccttag gtgatctgcc cgtcttggct tctcaaagtgc 67800  
 caccggcccg gccgagactt tatcttaaag gcaatgagca atcattaaag aaattgtatc 67860  
 aggttgc 67920  
 tacaatcata tttgaataat tataaattat tttggctgca gtggaaagaa  
 atgttgc 67980  
 agtggtaag tagtctcaa atgattcact agggtaat gatgggtttg  
 gcaactagggt ggagataact gagataaaaa aagaagagt gactgattt atggaggtgg 68040  
 gtaagtattg gaaagattgt acccaggaca aatttgaagg atttgggtt attctccaag 68100  
 ttttattca catattccca gaaaagtctc aggagttatt ctatctggcc tgggtggc 68160  
 gataaattac atgtaatttta attccttta atatcattct aagacggtaa acttaactat 68220  
 aattttttg gggagaggat aggaaggtac tttgatactt tctcatttac ccaagaacag 68280  
 ggcttcaca ggcattggaga ggggtggaga gagggtgtt gttcttagat tcattgtctt 68340  
 ataggatgca tggggcagg tgtgataatg atgtcttacc ttgcaaaata aaaggatgat 68400  
 gctaatagtt caattcctag ataaaatcag gatagcagag gaggaatctt gtggaaagctt 68460  
 ttggttatt tgggagggaa ctgtaattat gaaattgggt aagatggtgg gaggcttc 68520  
 ccctcacacc atcacgtttg tttctgtcct ttggctcac tgtacatggc caggaataat 68580  
 agtcttcaag tgtcacttcc aagctatgaa ttcccagaa aatgaaacat ggatgatttt 68640  
 tcttgcttag ttcagggcca tgtgtattga tttgtatctg atcttgaatt tttctaactc 68700  
 aaggttcta catactacaa gtttctaac tcaagaacat tttctaact caaggtttt 68760  
 actactaata gcagcagttg acatttatat agtggttct ctgtgtcaga cactgttctg 68820  
 aacacttttc atgtgttaat ttaatcatta tggaaacctt atgaggtaag taccatcatc 68880

attcccattt tacagacaag aaaattgaca gcagagaggc tttgtaacta acccaagatc 68940  
 actaggaagc agtagagggt gtatttaat cctggaactc tagcttcata gactgtgctt 69000  
 tttaaccaat gggcttaagt tggtaattct tactgatttg gttaatcact tactgatttt 69060  
 gataatcact tctatttctt gagtatttac tatattaaag acactttgat acgttagtaag 69120  
 tgaaagtaga cactggcact attagttc tagaaagaaa taaaatatta cctatatatt 69180  
 cttatatagg tactatttc aatcccattt catgaggggg aaactgagac ttaggggggt 69240  
 ttaagtatct gctggtaagt ggcatagtca ctttgaattt aggtctacccataccacaa 69300  
 cccatggat caactgtcag ctaataccta tctagcttat agaaatttgg ttttgcgg 69360  
 tgtctctact gcatacctgca ggtcttcctt aatattacag gatctcttgg gaataaaaca 69420  
 actcttgcc tgaagtccaa tcatcaaata aaaaagccaa tatctctttt aactgtgcaa 69480  
 ttcaaggcaca tctagtgtaa tttacaact catcccagat tgcatttatt actctgtatgg 69540  
 cttgttccaa atacagacta tggagcccat gttagcttgc tcatgaaata taggatagag 69600  
 tgaggagtct ttgggttttc taatatggaa gttagggatg ccagcaataa ctttccatat 69660  
 ttccattaaag acatattttat tagtgcttac actcatatag ttgaatctat aattttata 69720  
 gaaattataa taatttcttc atcccagaaa gtcaaacatt tccaagtagg gaagaaaatt 69780  
 gactttcatg taatttctc agtttattta tgctgaagag gctttgcca tgtgaagttt 69840  
 tctgagtagt gcttagaggg aaataaatct ttcattttaa atagcataaa acatctggg 69900  
 attagttctt atctattaaat ttaatagttc atggaaactcc agttttgtgg agtttgcct 69960  
 aaattcaggg tagagtggaa atcatgttcc ctgatggaaa aaacttggct gctaggccaa 70020  
 gattggtttt gacaaaaattt gcagttcaact cgttgattta ktttagatgat ttcattcta 70080  
 cttaacctta agaagatgtc ttcattggat tcagcgaatg tttttaaaca gatataatgag 70140  
 gcaaacaaga atgagttatc agctaatac acagatagtt gattccatga atagactgtc 70200  
 aggctgaagt gacccaaagat gatgagatac ttttcaagaa cagtcttcag atggtaaaaa 70260  
 ttagacagta ttccacataa gtactcccat tatagtaaaa acatcacctt tttagaattca 70320  
 aaacaagtgg taarcatgaa attccctgtt aaatgcttc tgttatagct actctgataa 70380  
 acatttctg tggcgaattt atttcactaa agatttgcag acccaaacat gcattttcaa 70440  
 catacaaaat tgttccctt tgttttaaac agagcactgt tatcaagatg ggttatgacc 70500  
 ttcacagaat gaaactgatt gattcattct ctcattataa acttttaatg atgatatgga 70560

agacccaaac ccatacgcaa acataaacc aatataagca cttatcttag taaggacatt 70620  
 ttacggaaaa gagratggtt agctcatctt tgggagaata aaaatttaat atttcttaac 70680  
 agtcactgag tgagagtctg ctgggagggt agattactgg tttcttagaa caagtccgaa 70740  
 acccattaag cctcacgaaa aattgttatg cattttatca ggaagtctaa tttcttccca 70800  
 gaggttaagtc ttgaataaca ttaccaaata gggtttatc ccataccagg ttttggacaa 70860  
 ttttcttt atagagataa tagggtcttg tatctataaa taagcctgat taaaaattaa 70920  
 ataagttatt tggtaagtc tcattaaaga atgtaaattt agctcccacg ctcggatatc 70980  
 aaaggtttgt gtttatgagg aaaataaaga gagagaatat gtgtgtgtgt gtctctctgt 71040  
 gtgtgtgtgt gtgtgtgtgt gtgcacacat gtgctctcca ctccctcaat ctgtggacac 71100  
 atgattagaa aaactaccct taagcatttt gatcaattat ggcaaagcaa gtgttacagg 71160  
 agcatgttgc aacaaaacca gaaagaatgc aaactggcta gccatatgt aaaaagctgaa 71220  
 actggatccc ttcccttacac cttatacataa aattaattca acatagatta aagatttaca 71280  
 tgtagacactt aaaaaccataa aaacactaga gggaaaccta ggcaataccca rtcaggacat 71340  
 aggcatgggc aaggactttg tgtctaaaac accaaaagca atggcaacaa aagccaaaat 71400  
 tgacaaatgg gatctaatta aactaaagag cttctgtaca gcaaaagaaa ataccatcg 71460  
 agtgaacagg caacctacag aatgggagaa aattttgca acctactcat ctgacaaagg 71520  
 gctaataatcc agaatctaca atgaaatcca acaaatttc aagaaaaaaa caaacgaccc 71580  
 catcaaaaag tgggcgaagg atatgaacag acacttctca aaagaagaca tttatgcagc 71640  
 caaaaaacac acgaaaaaat gctcatcatc actggccatc agagaaatgc aaatcaaaac 71700  
 cacaatgaga taccatctca caccagttag aatggtgatc attaaaaagt cagggaaacaa 71760  
 caggtgctgg agaggatgtg gagaaatagg aatacttttta cactgttggt gggactgtaa 71820  
 actagttcaa ccattgtgga agtcagtgtg gcgattcctc agggatctag aactagaaat 71880  
 accatttgac ccagccatcc cattactggg tatataccca aaggattata attcatgctg 71940  
 ctataaaagac acatgcacac gtatgtttat agcggcacta ttcacaatag caaagacttg 72000  
 gaaccaacct aaatgtccaa caacaataga ctggattaag aaaatgtggc acatatacac 72060  
 catggaatac tatgcagccc taaaaatga tgagttcatg tcctttgtggat ggacatggat 72120  
 gaaactggaa accatcattc tcagcaaact atcccaagga caaaaaacca aacaccgcat 72180  
 gttctcaactc ataggtggga attgaacaat gagaacacat ggacacagga aggggaacat 72240  
 cacacatcggttgc ggcctttgtt ggggtggggg ggggggggag ggatagcatt aggagatata 72300

cctaatgcta aatgatgagt taatgggtgc agcacaccaa catggcacat gtatacatat 72360  
 gtaacaaacc tgacatgtgt gcacatgtac cctaaaactt aaagtataat aataataaaa 72420  
 gaaaaaaaaa gaatgcagct gttacaacaaa gtatattca agccagtaag gtctagttaa 72480  
 aaaatactga gacctaaaag acctgccaca cattaaaatt gtgagggaaat tgattttgcc 72540  
 ttagcaaaat gataacacat caatgtawcc tgaacaatag aagaaggtaa ttcatgagga 72600  
 ttatctaaaa caagtgagtt taatgtcgtg aatctgattt gttttggaag cagatcattt 72660  
 tattttaaa aatataatatt taatgctatt taaataattt tatatgagac ctatttata 72720  
 tgagaccttg atttatgtta atctagagtt tgacaaaaat acgattttt aagaatgtac 72780  
 atcccagagg ctgacaaggg attaccatat aaagtcacct agggcaggga tcatgcttaa 72840  
 tttgtctact cagtaggcaa ttggaagttt tggtaggtt gaacctgttc ggtaaagggt 72900  
 aaaatgtatt ctgcagttct ttttaatcta ttaagggcta accaggatat gatactgtac 72960  
 caaatcatag tctttgata atggatgaaa gaaagaatgt gcttagagtt gtgtttacg 73020  
 atttatattt tctgcaacta gtaggttta cttttacat aaaaatgtg taaaaatatc 73080  
 ttaaacctca agtttatata gttttggttt aattcctgag ttttcata catagagaty 73140  
 aataactcaca tggccttcag actccattcc cacactccca gtagttatac tagaagaatt 73200  
 gtggaactgt ggaaggaatt cagccagaat aagggtgggc tagatttat gattctgcaa 73260  
 cattcattat atttcttagcc attttgaagc acataattag tgtgctaagt cctaggata 73320  
 acaaggtaaa taaaaccata tccctgtccc catctagctt gcatgttaggc aagtacacat 73380  
 ctcatctgaa atacatgttag ttagtcctga gtgagtgaat gattttggat cctacagagc 73440  
 taaaaatgatt tcgtcactca ttccacctcc tgggaggctt agaacagact ttataaaata 73500  
 agcaattgac ttctcttaaa ctgagtcttg aagggttgag ttgtgaagta aagaagggag 73560  
 gagggatcaa tccagataaa ggtaaaggaa cctgtgcaac tgtagccgcc caattctgt 73620  
 ctcttgctgg araggtgttg agatcattt gaggagaaga ggcactctgg ctttctgagt 73680  
 tttcagcggtt tttcgttgg ttccttctca tctttgtgag tttgtctagc ttgtatctt 73740  
 gaggctgctg gcctttgaga tttttgtggg aatcttttg cggatgctgt tttttttttt 73800  
 gttgctttct gtttggggc ctttaacag tcaggcccct cttccgtagg gctgctgtgg 73860  
 tttgctgggg gtccactcca ggcccttattc acctgggtgc ctcccttccc tggagatatc 73920  
 agtggaggct gcagaacagc agagatggct gcctgctcct tcctctggga gctcccaccc 73980

agagaagcac ctacctgagc cagtggAAC gctcccstat aaagtgtctg gcgacctcta 74040  
 ctgggggatc tcatccagtc aggagggatg ggatccagga tccgtttaag gaagcactct 74100  
 gactgcccct tggacaagcg ggtgtgctgt gctggggaa atcccactct tccggactgc 74160  
 ccggattcct cagagccagc agggggaaag actgagtcag ctgatcctgc ggagactatg 74220  
 gccactcctt ctgcaagggg ctctgttcca ggaagatcag agttctgtcc ttaaaccctt 74280  
 ggctggagtt gctgaaattc cagcagggag gccctgcctg gtaaggaggt atgggtctgg 74340  
 cctaaagagg cagtctggcc acaatttgcc atagctgctg tgctgcactg tggggaaattt 74400  
 ctcctgggtc caaactgccc aatctccctg gcactggcag gggaaaatgg ctgacaggag 74460  
 ctgcgggttt ggctgccacc cctccctcca ggagctcagt cgtcttagac ggactccagc 74520  
 ccagcggctg ctgagaatct gcacagctcc gtgcttgaga cccaaggccc tggtggcatg 74580  
 ggctcatgag gggctccctg atccatgggt tgcagatctg tggaaayaagc atggtttccc 74640  
 aggcccccttgcacacaatcag tcgccccctc ccttggctgg cgggtggagc tcccccttgc 74700  
 ctgtcagct cctaggtgaa ccacggctcc accctgcctt tcctcactct ccatgcgcac 74760  
 gccacccatg cagtcctcagt gagagaacccct agatacgtta gttgccagtg caggtcgctc 74820  
 acagtttca tttagtctgga tgggagcctc tgaccccaac tggccatctt cggccatctt 74880  
 ggtcctctta gctgttcttt tctaaagacc ttctgttttccatataatg ttagatttag 74940  
 tcagtcaagt tcctaaataa atcgagctgg acttttgatt gggattgaat tgaattttag 75000  
 gtttgagttt gagtatatttgc acattattaa tatattttt aatactgtat attgtatagt 75060  
 atatcatttt aaagatatttttatgtatgtta tttaaatataaaatgttctatgcattcc 75120  
 atattctgtt ttcttcataata ttctgttaat tccctggatc ttgtatgtttt ttgttgc 75180  
 tgctggatc ttatatttttcaat cagctggatc ttgtatgtttt ctttggatataat 75240  
 agggaaaacat gtacatctaa acaaaaatgtt tatctttaaa accaaaagat tctctgctga 75300  
 agttgtcra cttagggatgt tcattgtatgc ccaataaaaaa cagatttta ctctaataat 75360  
 tgttcattttt cctgtacaaa gcttggggaa ttcacagcag agagaaaatttataatttgc 75420  
 tgtttgcattt actttctgtt gtctacagta gaaagtaaga ggatagtggg gtataaatct 75480  
 tagataagtt aaataaaacat taactttcca aaactaatag taatagtaac acctattgtt 75540  
 gtggacacca ttgggttgc ccatgtatc cattcctctc ttcatctttt catacagaat 75600  
 ctcaattgtt ttcttcacac agctgtgtgc ttctggagaa cctgacccatc ctacagatcc 75660  
 aggggtgctc ctgattgggtt taaagacagc ccattctctc gccagtgatt gtttcaggta 75720

tggggAACAT gatccaattc tggccaatta aatkataattt gctgggtgga ttctggggca 75780  
 agttttctca ttcccaagga agagacacaa aaagacgtgt tttctctatc tgcttgcatc 75840  
 agagtgttcc tgatttaaar gtggatttaa tataaagtct ttatataaaa gaactgaaaa 75900  
 tagaacaaag ggtatttaca ttaagttcaa aatgcacaag agattttggc aaaaaaataa 75960  
 taacaagttt tatagttaaa aagagtaaga ataatatcag gttaatcaat ttttaaaatt 76020  
 ggggtaaatt tacataccat aaaaagccgt tttcaatgtt tagttcagtg agttttgaca 76080  
 attttataca cacctgtaag tacacccaa acaaaatata aaatattttt tatcaccgg 76140  
 ggacgttctt tcctgtccct ttcttagtcaa agatcaccct ttcaaaggaa atcactttt 76200  
 gagtttgtc gtcacagatt agtttaaccc tttcttgaat gtgacataac tggaaatcata 76260  
 caatataat tttgggtgtt gccttagctt ttatctcca tataatgttc ctgagatgca 76320  
 cacaatataca agtagtctgt tattttttt ttatcggtga gtagtattcc acagtacaaa 76380  
 tttaatgaaa ttgttttacc ttttttttta tggatggaca tttgagcagc ttttggtttt 76440  
 atgtattacg agtaaaacta ttgaatgttt ttgtataaat agttttgtaa atgtatgttt 76500  
 tcaattcttt ttgataaaacg tctagagagg agtcatatgg ttatatggct agtacatgct 76560  
 taacttaatg tgaattttcc tgaatttctt taaagtgggt gtatcctttt acactttcac 76620  
 tgagagttcc agctacacca tatcccttaac catcaacttag tgtcatgaat ctctttcatg 76680  
 ttagctttc tagtcagtgt gaaatgtat ctcgctgtga tttcaaattgg aatttttaaa 76740  
 aattaccaat gatgttaagc aactttgtca tgaatttact gaggattgt atatcttctg 76800  
 ttgttagta tctttcaag tttcaccta tttaaataac tggatttgct cgtttttttt 76860  
 ttttggttttt gattttaga agttttttt tattctgggt gtttagttat agatttagatg 76920  
 ccaggatataat gatgttaat attttccta gtctgtggct tgcataatca tttaaaaatg 76980  
 atgtccttataatgaaatggccaa ctgttaattt ttgatgaagc ccaatttaat tcgtttatg 77040  
 gttggtgagt ttgtgtccct atctaagaaa tgtttgcata atccaatgtt tcaaataat 77100  
 atatttttt ctagaagctt catattttg gattttatgt ttaggtctgt gatcaatctc 77160  
 aaattaaattt ttatgtgtcc agttagataa ggattgaagt tcattttctt ccataatgaat 77220  
 atccgggttcc agtagtgttt tgtaaaaaaaa aaaaaacttt cttttttcc tactgaattg 77280  
 atcagatccc ttggccaaaa attaatttac ttttttttttgcataatca ttgtactct 77340  
 ttattctgtc ccagtgataa aactttctta ttaggtgcag acatattaaa atgtgttatg 77400

ccttcttaat gattaaaatc cttaagcca gtgccttcc tagcacacaa aattttgaa 77460  
 caaagtcagg tttgttctac taagatttg atgtacagtc atgcatact taacaacaga 77520  
 gatatgtga gacatgtgcc cttgggtgat tttgccattg tgtttacatc acagagtgca 77580  
 cttacacaaa cctagatggt atagcctact acacacctgg gctacaaacc tttacagcat 77640  
 gttactgtac tgaatattgt aggcaattgt aacacaatgg taaatattg tgcatactaaa 77700  
 catatttaaa tatagaaaag gtaaagtaaa agtttaatat aaaaataaac atggtgacc 77760  
 tatacagggc acttaccata aatagagcgg caggactgga acgygctgta ggtgagtcag 77820  
 tgtgtgagta gtgagtgaa gtgaaagcct aggcacattac tagacactac ttagacttt 77880  
 ataaacactt actcttaggc tacactaaat gtagaaaaat acatattctt taacatacat 77940  
 attctaaaaa tacatatcct aaacatacat atcctaaaaa tacatattct agggaaacta 78000  
 aattaactgt agcttactat aactttgta ctccataaac tttatctt tttaaacttt 78060  
 tggactctt taatctttt taaacttagc taaaacaca agcatattgt acagctata 78120  
 aaaatattt ctatccatcc ttattctaa ggcactttt tctatctt aatttttat 78180  
 tttatctt tagcttttta agcttcttg taaaaataa agaaacaaac acacgcatta 78240  
 gcctaggcct acacagagtc aggcacatca agatgttgct ggatgatagg aattttcag 78300  
 ctctatctt atcttatggg accaccattg catacgtggt ctgcattga cccaaacatt 78360  
 gttatacagt gcatgactat acttgtctaa tactatccc tctcacaaag caacctcagt 78420  
 gaattaaaac tcatcaytac ctcaagttc caaggccatg ttagccccct gaggactcag 78480  
 ttgctcactt ttcttggtt caatttaatg ctgcagcagt gtaagaaaga tcatcgtac 78540  
 tgcatttcca agcctcatcc tccaataaaag ctttgcataa taatttttatt tcttagtcaa 78600  
 tgtcaagctc aagagtggaa gaaaagagta ttacttatttgcctttaaa acstcactca 78660  
 cttgaaggc tgctatgtgg ggtttaaaata gatataatag tttggttttc tattagactt 78720  
 ttgacatgtt aactgataag cattctggtt ggcttgacag ttgtatctt tttttgcaaa 78780  
 ttaataaatg actctttgg tccatgagaa cagatagcaa aaatgtgcct aattatacca 78840  
 tagaatcaat ttgttaggtca aatcaacttt caccagaata gtgtctccct gcaaatttga 78900  
 tacataaaagc ttattaaatttgccttgc tgcataatgac aacattataa ataggcttta 78960  
 tctaacattt tttagaatttgccttgc tccatgagaa cagatagcaa aaatgtgcct aattatacca 79020  
 aagcaaagat attttgccag tttagttttt tagttactaa gcacttctca atagatattt 79080  
 atgattgctg gactatggca tcaaattttgccttgc tctcactaat aacttcttgc gattacaaag 79140

tccaatagca ataatttatt atattaatta agagacatcg tagtgatgtg tttaatagta 79200  
 ataggaatta gacaatatta ttaaggattt ggtgtatata taaaataatg ctattcatga 79260  
 ctaaaattta tcttgattca ttttctaaaa ataactcaat atatttcatg tctctagtagtac 79320  
 ttttattaca attctctatg aatatcctt agcttaggta ggatattca ttaagcatac 79380  
 atcatgctaa ctcaaggcag gaaataataa aattatgtga agtgttaaca tatctgagag 79440  
 taaatgataa aaattaatct aaccaagatg ccagccataa aataaattac atgggctgaa 79500  
 gaaaaatgtg aacatcaa ataaaaagaag aattgcattc taaatctaag gcaaggtaga 79560  
 tgagtagagt tgagttcattt ataaagaaar atttgaagtc ataactataa cttagacttta 79620  
 cttcaaatga acaaatactca attcagattc tttcttgccc tgagctgcag ctaatatgtc 79680  
 tccatttcac gacgaatact gtcaggaatg acaatgaccc ataagtagaa coagtacaaa 79740  
 gttcctcccta gaatggaatg tcacccatgt gagggaaaag aagacaaatt aagacyaaaa 79800  
 ttaaaatata tcaccagcag ccccaaagca ctgactcaaa atcaggtcag tttaaacgtt 79860  
 tggatgttataatgt tacttcaatt tttaatattt cctggataag taaccagtaa gtgggggatt 79920  
 ttcccaacag aaaacaaaatg tctctctagg aaaactaagg cagtgaattt tcaacaagag 79980  
 gaacagtcaa tgaaggcaaa aaaaaaaaaa accaaaaaaaaa aaaaaaaaaac acaaaacact 80040  
 grttaattgc tgtttcaaattt tttccattt aatttgcattt atttcgwttt tttttttta 80100  
 caaaatttcc tcttagttga cacatgcttta ttatagaaaa aatgtaaaaaaa taaaagaaaac 80160  
 agaaagcaga aaagtaaccc atgcaatgtt tagcactcag agaaaagcaa tttaaatgtt 80220  
 gttccacacc ctccctgaact tttatttattt tttaacata attgtgtca tattgaatattt 80280  
 acattttttgc tattctgggt atttactcac ttaatgtgac atagggtgtt ttgcatttttta 80340  
 ttacataactc ttccataaaga taattcttaa caacttcaca atattctgac aagtatatgt 80400  
 gttcccgaa gtagaatat ttatatttgc tgacacacat taaaattgata catatagaca 80460  
 attacccccc caagaattgtt actgatttac accatttat tatgatacca ttatattgtt 80520  
 tgagcatgcc tatttcacca cattttcaat agcattaatc tatttctgga ctgtttattt 80580  
 caagatttttcc cagttttgtt aaaaactttaa cacacttcc ctcacattaa 80640  
 cattgaaattt gcttctaaat gcaattaataa aaaataatattt tgagatttttgc attgtgtctc 80700  
 ttcccgtaa acctttccat gacttccctt ttgtcttagtt cagtggtgct cagccagggg 80760  
 cgattttatac ccccaaggaga aattggacaa tatctggggg cattttggtt gtcccaactg 80820

gaggggtggga ctgggggagg cagggtagt ggagagtctt gctactggca tctagtgttt 80880  
 aatggccagg gatactgcta aacattttc attgtgctgc ataagacaga cccccaacaa 80940  
 caaaggattt ccccaagttt tccaaaatgt caatagtgtg ggtgggggtc aaaaaactct 81000  
 catctatggg atatattgga aacaacttg cttggcacac cagcctgtct ttcatccaac 81060  
 tcaatagtct tctaactgag gtacttaaaa gcctggtgg ttggttcta gatcctcaaa 81120  
 atgatttgca ggataatata tccatgttca aaataatact acaggagaaa gaggagagga 81180  
 gggaggacga gaaagaggtt tatcttcat ctatccaaa tcatgctatg ttgcaatgcc 81240  
 tctagggtga aaagaaaaag caaacttagga gcacgacttt aaagattaat caaggttaacg 81300  
 cataaatcca tgtggcttca aactctttat aacaaaatga gatacagtgt gcatttaata 81360  
 tttggtaagg atagtcttat ctttcttgc ttaaattttt tctagatatt tccacagact 81420  
 tacaatttcc atttgaacct gaaaactggt tcagttaaa aaaattcccg tccaattttt 81480  
 tacaatcaat gaacctacat tgaaatatca ttatatgtac atatacatat aaattacatt 81540  
 tctataaatt tgtcctaagg aatgaagtag aattggatag aaagatatgc aaataacact 81600  
 aacatttaca gcatgcttac aatgtgccag cattcttata catcttaatg tctcagttaa 81660  
 tcatcacaac tacgctcaag ttggtaacac tgcgatcttc actttatgaa gaaaactgag 81720  
 gctcagaaca ggaagttgtt ccaagtcaca gatctatgaa gattatagat caaaccacat 81780  
 tctgtgtgat gccaagaccc tatattccagc tttttctaaa tagcagtctt ttgggtttca 81840  
 cttatgtgtg tgggtgtctt tgggtgttt tcaaagtagt tgaacaacaa tatcagggaa 81900  
 atcatggttt taacgttttta ggtatatttc ttatattcc caaaaaacca atttgaaaat 81960  
 attctaccta cgagcctctc agagaggctg tctctttat atccaggaac cagcacttt 82020  
 cttcaaaaggc taacacaaca atggcctgaa ggcaggacca gtgttgtgtt agtaaagtt 82080  
 tgttagagtaa aacatgtttc aggatctgtc agggacttca gatactttac tgatggcatt 82140  
 gaattcctgg gcttgaccta ttactgcacc tccagcatcc aagagcactg tcttacaact 82200  
 tactccttata gactcaccta taacaaacat cactgattac atcaaagaaa attattgtta 82260  
 atgccactta gactaattaa cacaacctt ggtgttagata ccaataagaa tagtttaagt 82320  
 accaagtaat ctactcttaa aatgttgatt cttcttagga tatttcagtg ctaattaatt 82380  
 gtccagagga tgggtgtttt ggataatgtg cattatgcta tcaagggcaa gtcacatgc 82440  
 gtgttaggcac acacacacac acacacacac acacatcacc ccccaaaatg ttarattga 82500  
 agcaatttaa agtaaattat cacacagact acagaatagt ctcagcaaac agtaactacc 82560

agaattatct ttccagtgtt acttataata ataacaaaat ttattgaaat gtctaagacg 82620  
 actggcttga ttttagaaaat atcttcatac attcttgagt ttctcaactt cactatTTT 82680  
 gatattttgg gctggagaat tctttgtctt gggagagatt gtcctgtgca ttgcaagaag 82740  
 tttagaaccc ttgggtgtctc ccaagtacat gccagtagta gctcccttt ctcagtagtg 82800  
 ccaatacaaa atgtctttag acatcgtaa atgtcccctg ggggcaaaaat tgcacctagt 82860  
 tgagacctat aaaatggact acaaccatg tagctattaa gagtatgtta aaaaaatatt 82920  
 tacttatcta cgcaaatgtt catagtatat ttaatggaag aatcaggaca aaacaacaga 82980  
 taagtttagac ctgtgatttat aaaataaaaaa tggtacatg cattgaaata caaagacagc 83040  
 tagcctttt tgggtgtctt ctctgtactg cacactaacc tttcacatgt gttatctgtt 83100  
 taatttccat aataaccctc agaggtggt aattaacccc atttgataaa taaggaaaca 83160  
 gaatctcaga caggttaagc agctgaatga taattttata atattaaccg cagtcatgtc 83220  
 tgggttagtga aattgggtgt aattatttt ctctgtattt tccaagattt caacaataag 83280  
 catctattat tttaatcag aaaacttaac aaatgacatt attgggccyg gcacagtggc 83340  
 tcacacctgt aatcccaaca ctttgggagg ccgaggtggg aggatcactt gaggtcagga 83400  
 gttca 83405

<210> 2  
 <211> 1896  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(1893)

<400> 2  
 atg ttc tac gca cat ttt gtt ctc agt aaa aga ggg cct ctg gcc aaa 48  
 Met Phe Tyr Ala His Phe Val Leu Ser Lys Arg Gly Pro Leu Ala Lys  
 1 5 10 15

att tgg cta gcg gcc cat tgg gat aag aag cta acc aaa gcc cat gtg 96  
 Ile Trp Leu Ala Ala His Trp Asp Lys Lys Leu Thr Lys Ala His Val  
 20 25 30

ttc gag tgt aat tta gag agc agc gtg gag agt atc atc tca cca aag 144  
 Phe Glu Cys Asn Leu Glu Ser Ser Val Glu Ser Ile Ile Ser Pro Lys  
 35 40 45

gtg aaa atg gca tta cgg aca tca gga cat ctc tta ctg gga gta gtt	192
Val Lys Met Ala Leu Arg Thr Ser Gly His Leu Leu Leu Gly Val Val	
50 55 60	
cga atc tat cac agg aaa gcc aaa tac ctt ctt gca gac tgt aat gaa	240
Arg Ile Tyr His Arg Lys Ala Lys Tyr Leu Leu Ala Asp Cys Asn Glu	
65 70 75 80	
gca ttc att aag ata aag atg gct ttt cgg cca ggt gtg gtt gac ctg	288
Ala Phe Ile Lys Ile Lys Met Ala Phe Arg Pro Gly Val Val Asp Leu	
85 90 95	
cct gag gaa aat cgg gaa gca gct tat aat gcc att act tta cct gaa	336
Pro Glu Glu Asn Arg Glu Ala Ala Tyr Asn Ala Ile Thr Leu Pro Glu	
100 105 110	
gaa ttt cat gac ttt gat cag cca ctg cct gac tta gat gac atc gat	384
Glu Phe His Asp Phe Asp Gln Pro Leu Pro Asp Leu Asp Asp Ile Asp	
115 120 125	
gtg gcc cag cag ttc agc ttg aat cag agt aga gtg gaa gag ata acc	432
Val Ala Gln Gln Phe Ser Leu Asn Gln Ser Arg Val Glu Glu Ile Thr	
130 135 140	
atg aga gaa gaa gtt ggg aac atc agt att tta caa gaa aat gat ttt	480
Met Arg Glu Glu Val Gly Asn Ile Ser Ile Leu Gln Glu Asn Asp Phe	
145 150 155 160	
ggt gat ttt gga atg gat cgt gag ata atg aga gaa ggc agt gct	528
Gly Asp Phe Gly Met Asp Asp Arg Glu Ile Met Arg Glu Gly Ser Ala	
165 170 175	
ttt gag gat gac gac atg tta gta agc act act tct aac ctc cta	576
Phe Glu Asp Asp Asp Met Leu Val Ser Thr Thr Ser Asn Leu Leu	
180 185 190	
tta gag tct gaa cag agc acc agc aat ctg aat gag aaa att aac cat	624
Leu Glu Ser Glu Gln Ser Thr Ser Asn Leu Asn Glu Lys Ile Asn His	
195 200 205	
tta gaa tat gaa gat caa tat aag gat gat aat ttt gga gaa gga aat	672
Leu Glu Tyr Glu Asp Gln Tyr Lys Asp Asp Asn Phe Gly Glu Gly Asn	
210 215 220	
gat ggt gga ata tta gat gac aaa ctt att agt aat aat gat ggc ggt	720
Asp Gly Gly Ile Leu Asp Asp Lys Leu Ile Ser Asn Asn Asp Gly Gly	
225 230 235 240	
atc ttt gat gat ccc cct gcc ctc tct gag gca ggg gtg atg ttg cca	768
Ile Phe Asp Asp Pro Pro Ala Leu Ser Glu Ala Gly Val Met Leu Pro	
245 250 255	
gag cag cct gca cat gac gat atg gat gag gat gat aat gta tca atg	816
Glu Gln Pro Ala His Asp Asp Met Asp Glu Asp Asp Asn Val Ser Met	
260 265 270	

ggt ggg cct gat agt cct gat tca gtg gat ccc gtt gaa cca atg cca	864
Gly Gly Pro Asp Ser Pro Asp Ser Val Asp Pro Val Glu Pro Met Pro	
275 280 285	
acc atg act gat caa aca aca ctt gtt cca aat gag gaa gaa gca ttt	912
Thr Met Thr Asp Gln Thr Thr Leu Val Pro Asn Glu Glu Glu Ala Phe	
290 295 300	
gca ttg gag cct att gat ata act gtt aaa gaa aca aaa gcc aag agg	960
Ala Leu Glu Pro Ile Asp Ile Thr Val Lys Glu Thr Lys Ala Lys Arg	
305 310 315 320	
aag agg aag cta att gtt gac agt gtc aaa gag ttg gat agc aag aca	1008
Lys Arg Lys Leu Ile Val Asp Ser Val Lys Glu Leu Asp Ser Lys Thr	
325 330 335	
att aga gcc caa ctt agt gat tat tca gat att gtt act act ttg gat	1056
Ile Arg Ala Gln Leu Ser Asp Tyr Ser Asp Ile Val Thr Thr Leu Asp	
340 345 350	
ctg gca ccg ccc acc aag aaa ttg atg atg tgg aaa gag aca gga gga	1104
Leu Ala Pro Pro Thr Lys Lys Leu Met Met Trp Lys Glu Thr Gly Gly	
355 360 365	
gta gaa aaa ctg ttt tct tta cct gct cag cct ttg tgg aat aac aga	1152
Val Glu Lys Leu Phe Ser Leu Pro Ala Gln Pro Leu Trp Asn Asn Arg	
370 375 380	
cta ctg aag ctc ttt aca cgc tgt ctt aca ccg ctt gta cca gaa gac	1200
Leu Leu Lys Leu Phe Thr Arg Cys Leu Thr Pro Leu Val Pro Glu Asp	
385 390 395 400	
ctt aga aaa agg agg aaa gga gga gag gca gat aat ttg gat gaa ttc	1248
Leu Arg Lys Arg Arg Lys Gly Gly Glu Ala Asp Asn Leu Asp Glu Phe	
405 410 415	
ctc aaa gaa ttt gaa aat cca gag gtt cct aga gag gac cag caa cag	1296
Leu Lys Glu Phe Glu Asn Pro Glu Val Pro Arg Glu Asp Gln Gln Gln	
420 425 430	
cag cat cag cag cgt gat gtt atc gat gag ccc att att gaa gag cca	1344
Gln His Gln Gln Arg Asp Val Ile Asp Glu Pro Ile Ile Glu Glu Pro	
435 440 445	
agc cgc ctc cag gag tca gtg atg gag gcc agc aga aca aac ata gat	1392
Ser Arg Leu Gln Glu Ser Val Met Glu Ala Ser Arg Thr Asn Ile Asp	
450 455 460	
gag tca gct atg cct cca cca cca cct cag gga gtt aag cga aaa gct	1440
Glu Ser Ala Met Pro Pro Pro Pro Gln Gly Val Lys Arg Lys Ala	
465 470 475 480	
gga caa att gac cca gag cct gtg atg cct cct cag cag gta gag cag	1488
Gly Gln Ile Asp Pro Glu Pro Val Met Pro Pro Gln Gln Val Glu Gln	
485 490 495	

atg gaa ata cca cct gta gag ctt ccc cca gaa gaa cct cca aat atc Met Glu Ile Pro Pro Val Glu Leu Pro Pro Glu Glu Pro Pro Asn Ile 500 505 510	1536
tgt cag cta ata cca gag tta gaa ctt ctg cca gaa aaa gag aag gag Cys Gln Leu Ile Pro Glu Leu Glu Leu Leu Pro Glu Lys Glu Lys Glu 515 520 525	1584
aaa gag aag gaa aaa gaa gat gat gaa gag gaa gag gat gaa gat gca Lys Glu Lys Glu Lys Glu Asp Asp Glu Glu Glu Asp Glu Asp Ala 530 535 540	1632
tca ggg ggc gat caa gat cag gaa gaa aga aga tgg aac aaa agg act Ser Gly Gly Asp Gln Asp Gln Glu Glu Arg Arg Trp Asn Lys Arg Thr 545 550 555 560	1680
cag cag atg ctt cat ggt ctt cag cgt gct ctt gct aaa act gga gct Gln Gln Met Leu His Gly Leu Gln Arg Ala Leu Ala Lys Thr Gly Ala 565 570 575	1728
gaa tct atc agt ttg ctt gag tta tgt cga aat acg aac aga aaa caa Glu Ser Ile Ser Leu Leu Glu Leu Cys Arg Asn Thr Asn Arg Lys Gln 580 585 590	1776
gct gcc gca aag ttc tac agc ttc ttg gtt ctt aaa aag cag caa gct Ala Ala Ala Lys Phe Tyr Ser Phe Leu Val Leu Lys Lys Gln Gln Ala 595 600 605	1824
att gag ctg aca cag gaa gaa ccg tac agt gac atc atc gca aca cct Ile Glu Leu Thr Gln Glu Pro Tyr Ser Asp Ile Ile Ala Thr Pro 610 615 620	1872
gga cca agg ttc cat att ata taa Gly Pro Arg Phe His Ile Ile 625 630	1896
<210> 3	
<211> 631	
<212> PRT	
<213> Homo sapiens	
<400> 3	
Met Phe Tyr Ala His Phe Val Leu Ser Lys Arg Gly Pro Leu Ala Lys 1 5 10 15	
Ile Trp Leu Ala Ala His Trp Asp Lys Lys Leu Thr Lys Ala His Val 20 25 30	
Phe Glu Cys Asn Leu Glu Ser Ser Val Glu Ser Ile Ile Ser Pro Lys 35 40 45	
Val Lys Met Ala Leu Arg Thr Ser Gly His Leu Leu Leu Gly Val Val 50 55 60	
Arg Ile Tyr His Arg Lys Ala Lys Tyr Leu Leu Ala Asp Cys Asn Glu 65 70 75 80	

Ala Phe Ile Lys Ile Lys Met Ala Phe Arg Pro Gly Val Val Asp Leu  
 85 90 95

Pro Glu Glu Asn Arg Glu Ala Ala Tyr Asn Ala Ile Thr Leu Pro Glu  
 100 105 110

Glu Phe His Asp Phe Asp Gln Pro Leu Pro Asp Leu Asp Asp Ile Asp  
 115 120 125

Val Ala Gln Gln Phe Ser Leu Asn Gln Ser Arg Val Glu Glu Ile Thr  
 130 135 140

Met Arg Glu Glu Val Gly Asn Ile Ser Ile Leu Gln Glu Asn Asp Phe  
 145 150 155 160

Gly Asp Phe Gly Met Asp Asp Arg Glu Ile Met Arg Glu Gly Ser Ala  
 165 170 175

Phe Glu Asp Asp Asp Met Leu Val Ser Thr Thr Ser Asn Leu Leu  
 180 185 190

Leu Glu Ser Glu Gln Ser Thr Ser Asn Leu Asn Glu Lys Ile Asn His  
 195 200 205

Leu Glu Tyr Glu Asp Gln Tyr Lys Asp Asp Asn Phe Gly Glu Gly Asn  
 210 215 220

Asp Gly Gly Ile Leu Asp Asp Lys Leu Ile Ser Asn Asn Asp Gly Gly  
 225 230 235 240

Ile Phe Asp Asp Pro Pro Ala Leu Ser Glu Ala Gly Val Met Leu Pro  
 245 250 255

Glu Gln Pro Ala His Asp Asp Met Asp Glu Asp Asp Asn Val Ser Met  
 260 265 270

Gly Gly Pro Asp Ser Pro Asp Ser Val Asp Pro Val Glu Pro Met Pro  
 275 280 285

Thr Met Thr Asp Gln Thr Thr Leu Val Pro Asn Glu Glu Ala Phe  
 290 295 300

Ala Leu Glu Pro Ile Asp Ile Thr Val Lys Glu Thr Lys Ala Lys Arg  
 305 310 315 320

Lys Arg Lys Leu Ile Val Asp Ser Val Lys Glu Leu Asp Ser Lys Thr  
 325 330 335

Ile Arg Ala Gln Leu Ser Asp Tyr Ser Asp Ile Val Thr Thr Leu Asp  
 340 345 350

Leu Ala Pro Pro Thr Lys Lys Leu Met Met Trp Lys Glu Thr Gly Gly  
 355 360 365

Val Glu Lys Leu Phe Ser Leu Pro Ala Gln Pro Leu Trp Asn Asn Arg  
 370 375 380

Leu Leu Lys Leu Phe Thr Arg Cys Leu Thr Pro Leu Val Pro Glu Asp  
 385 390 395 400

Leu Arg Lys Arg Arg Lys Gly Gly Glu Ala Asp Asn Leu Asp Glu Phe  
 405 410 415

Leu Lys Glu Phe Glu Asn Pro Glu Val Pro Arg Glu Asp Gln Gln Gln  
 420 425 430

Gln His Gln Gln Arg Asp Val Ile Asp Glu Pro Ile Ile Glu Glu Pro  
 435 440 445

Ser Arg Leu Gln Glu Ser Val Met Glu Ala Ser Arg Thr Asn Ile Asp  
 450 455 460

Glu Ser Ala Met Pro Pro Pro Pro Gln Gly Val Lys Arg Lys Ala  
 465 470 475 480

Gly Gln Ile Asp Pro Glu Pro Val Met Pro Pro Gln Gln Val Glu Gln  
 485 490 495

Met Glu Ile Pro Pro Val Glu Leu Pro Pro Glu Glu Pro Pro Asn Ile  
 500 505 510

Cys Gln Leu Ile Pro Glu Leu Glu Leu Leu Pro Glu Lys Glu Lys Glu  
 515 520 525

Lys Glu Lys Glu Lys Glu Asp Asp Glu Glu Glu Asp Glu Asp Ala  
 530 535 540

Ser Gly Gly Asp Gln Asp Gln Glu Glu Arg Arg Trp Asn Lys Arg Thr  
 545 550 555 560

Gln Gln Met Leu His Gly Leu Gln Arg Ala Leu Ala Lys Thr Gly Ala  
 565 570 575

Glu Ser Ile Ser Leu Leu Glu Leu Cys Arg Asn Thr Asn Arg Lys Gln  
 580 585 590

Ala Ala Ala Lys Phe Tyr Ser Phe Leu Val Leu Lys Lys Gln Gln Ala  
 595 600 605

Ile Glu Leu Thr Gln Glu Glu Pro Tyr Ser Asp Ile Ile Ala Thr Pro  
 610 615 620

Gly Pro Arg Phe His Ile Ile  
 625 630

<210> 4  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

```

<220>
<223> Primer

<400> 4
atacctgtgg cgtacacatg 20

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 5
aaaaggtagg cctcaacttgc 20

<210> 6
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 6
ctgtggcgta cacatgaaac tg 22

<210> 7
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 7
acgttggatg acaaacgggg aaaactcctt 30

<210> 8
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 8
acgttggatg aatgattcag tttcttcaga gtgg 35

<210> 9
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

```

<400> 9	
acgttggatg ttcaatatga tgtgcctgta aacc	34
<210> 10	
<211> 35	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 10	
acgttggatg tgaccttct aaaatcaaac attca	35
<210> 11	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 11	
acgttggatg tggattcatt ccatgcgagc	30
<210> 12	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 12	
acgttggatg gcaagtgcatt ggacaatgag	30
<210> 13	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 13	
acgttggatg gagaatgcatt agtctatctg	30
<210> 14	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	

```

<400> 14
acgttggatg accctagaca ctccttactc          30

<210> 15
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 15
acgttggatg cactggtaa ttgctgttcc          30

<210> 16
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 16
acgttggatg agcatgtgtc aactaagagg          30

<210> 17
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 17
acgttggatg atagatgagt cagctatgcc          30

<210> 18
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 18
acgttggatg tacttacagg catcacagggc          30

<210> 19
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 19
acgttggatg ccagagttag aacttctgcc          30

```

```

<210> 20
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 20
acgttggatg gcatcttcat cctcttcctc 30

<210> 21
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 21
acgttggatg agtgaatatt ccatgccctc 30

<210> 22
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 22
acgttggatg gtgttcagaa aggcttctgg 30

<210> 23
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 23
acgttggatg aataggatta actaagaagc 30

<210> 24
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 24
acgttggatg ctcagctaca gaggttaatag 30

```

```

<210> 25
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 25
acgttggatg ttgagaaaacc ttctcctgcc          30

<210> 26
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 26
acgttggatg cttaaattgg gtgtaaatgc c          31

<210> 27
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 27
acgttggatg ttgccatgtg acacacctgc          30

<210> 28
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 28
acgttggatg aaagcaccag catctgcttc          30

<210> 29
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 29
acgttggatg ccctgagaag tttaagcttg          30

<210> 30
<211> 30

```

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 30  
acgttggatg gcaaggtaag aggataacaag 30

<210> 31  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 31  
acgttggatg tgtaagatgc acgaggacag 30

<210> 32  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 32  
acgttggatg acacctgtcg actaactttc 30

<210> 33  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 33  
acgttggatg aattccacag ccagacacac 30

<210> 34  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 34  
acgttggatg tgagtatcaa gctgtttgac 30

<210> 35  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>		
<223> Primer		
<400> 35		
acgttggatg ttttgcaact taacctggag		30
<210> 36		
<211> 29		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 36		
acgttggatg cagtacaact ttaaacaag		29
<210> 37		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 37		
acgttggatg aatggagtct gaaggccatg		30
<210> 38		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 38		
acgttggatg gttttggttt aattcctgag		30
<210> 39		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 39		
acgttggatg ggaaccacaa taagaccaag		30
<210> 40		
<211> 30		
<212> DNA		
<213> Artificial Sequence		

```
<220>
<223> Primer

<400> 40
acgttggatg tgtgatgcct ccagctttat 30

<210> 41
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 41
acgttggatg aaccatcacc catactgtcc 30

<210> 42
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 42
acgttggatg tactgagcct tgaaggatgc 30

<210> 43
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 43
acgttggatg atacctgtgg cgtacacatg 30

<210> 44
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 44
acgttggatg aaaaggtagg cctcacttgc 30

<210> 45
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer
```

<400> 45		
acgttggatg gcagggaaat gcattggatc		30
<210> 46		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 46		
acgttggatg actatctacc ctgccagttc		30
<210> 47		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 47		
acgttggatg ggaaagggga tcttaaaagg		30
<210> 48		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 48		
acgttggatg aactggcagg gtagatagtc		30
<210> 49		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 49		
acgttggatg caaagtccctc tatgtgcaag		30
<210> 50		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		

<400> 50  
acgttggatg agtgtgtgta gatagcatcc 30  
<210> 51  
<211> 30  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 51  
acgttggatg gcggcgactg atttgctac 30  
<210> 52  
<211> 30  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 52  
acgttggatg tctcctgatc catgggttgc 30  
<210> 53  
<211> 30  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 53  
acgttggatg ttgggattac aggtgtgagc 30  
<210> 54  
<211> 30  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 54  
acgttggatg ctgggttagtg aaattgggtg 30  
<210> 55  
<211> 30  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 55  
acgttggatg gcaagctcac atgcgtgtag 30

<210> 56  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 56  
acgttggatg gactattctg tagtctgtgt g 31

<210> 57  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 57  
acgttggatg gatgagtaga gttgagttcc 30

<210> 58  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 58  
acgttggatg gctcagggca agaaagaatc 30

<210> 59  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 59  
acgttggatg gtcaagctca agagtggaag 30

<210> 60  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 60  
acgttggatg tttaacccca catagcagcc 30

```

<210> 61
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 61
acgttggatg tcccatctca caaagcaacc 30

<210> 62
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 62
acgttggatg aagtgagcaa ctgagtcctc 30

<210> 63
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 63
acgttggatg tgcttgcattc agagtgttc 30

<210> 64
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 64
acgttggatg tttgcacaaa tctcttgtgc 30

<210> 65
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 65
acgttggatg cactagagga aaaccttaggc 30

```

<210> 66  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 66  
acgttggatg tagacacaaa gtccttgccc 30

<210> 67  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 67  
acgttggatg aggccaagat tggtttgac 30

<210> 68  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 68  
acgttggatg tcgctgaatc ccatgaagac 30

<210> 69  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 69  
acgttggatg agagaggaag gaggagaaac 30

<210> 70  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 70  
acgttggatg ctcagagtgg taggaaatcc 30

```

<210> 71
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 71
acgttggatg caaatgaagt tggagagagc 30

<210> 72
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 72
acgttggatg actttgcatt gctaactttc 30

<210> 73
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 73
acgttggatg gcaagcaact gtatcctaaa c 31

<210> 74
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 74
acgttggatg gatcacttgg tggatcttac 30

<210> 75
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 75
acgttggatg gtgttactgt agctaaacac a 31

<210> 76
<211> 30

```

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 76
acgttggatg tatctttgaa gggttcctcg 30

<210> 77
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 77
acgttggatg aactggagtc tgccaaaccac 30

<210> 78
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 78
acgttggatg cagtagaaac tggtaaggc 30

<210> 79
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 79
acgttggatg ggagaaggaa atgatggtgg 30

<210> 80
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 80
acgttggatg ctgttatgc tggataacc 30

<210> 81
<211> 30
<212> DNA
<213> Artificial Sequence

```

<220>  
<223> Primer

<400> 81  
acgttggatg tttgctgccg tgagacattc 30

<210> 82  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 82  
acgttggatg ctactaaagc ttctgttaagg 30

<210> 83  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 83  
acgttggatg ttctgtttt ttggcctgtc 30

<210> 84  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 84  
acgttggatg ctatgacaga tgactgtgac 30

<210> 85  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 85  
acgttggatg attgttttt aagaggcggg 30

<210> 86  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 86  
acgttggatg gtgctataat ccagcctgtg 30

<210> 87  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 87  
acgttggatg cagttgttc tggtagatc 30

<210> 88  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 88  
acgttggatg cttatccag taagcataacc 30

<210> 89  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 89  
acgttggatg agacagttga caaaggctgg 30

<210> 90  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 90  
acgttggatg tctctgaatc taatgttccc 30

<210> 91  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 91	
acgttggatg gttgtactgt acaattgtcc c	31
<210> 92	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 92	
acgttggatg aagcgacttg agcattcgtg	30
<210> 93	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 93	
acgttggatg tggtgtacat ttatgtcccg	30
<210> 94	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 94	
acgttggatg tgaggcctac ctttttgtac	30
<210> 95	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 95	
acgttggatg gttgagcatc ttttcatgtg	30
<210> 96	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	

<400> 96		
acgttggatg tggcaaagg acttgcatag		30
<210> 97		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 97		
acgttggatg gtaatcacac tgctaccctg		30
<210> 98		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 98		
acgttggatg gatttgtat tcttgaggg		30
<210> 99		
<211> 31		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 99		
acgttggatg gtgttagaaa tgggattaca g		31
<210> 100		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 100		
acgttggatg tatcaagcct cgggtattcc		30
<210> 101		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 101		
acgttggatg caaagtcatc tgcctaaacc		30

<210> 102  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 102  
acgttggatg caggtactca atagatgtgg 30

<210> 103  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 103  
acgttggatg gtattccaca taagtactcc c 31

<210> 104  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 104  
acgttggatg acagaaagca tttaacaggg 30

<210> 105  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 105  
acgttggatg acctaaaaga cctgccacac 30

<210> 106  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 106  
acgttggatg cctcatgaat taccttcttc 30

<210> 107  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 107  
acgttggatg tgcctcttct cctccaaatg 30

<210> 108  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 108  
acgttggatg aggaacctgt gcaactgtag 30

<210> 109  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 109  
acgttggatg aaccaaaaga ttctctgctg 30

<210> 110  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 110  
acgttggatg atcccccaag cttgttacag 30

<210> 111  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 111  
acgttggatg gtgattggtt caggtatgg 30

<210> 112  
<211> 30

<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 112  
acgttggatg aaacttgc cagaatccac 30

<210> 113  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 113  
acgttggatg gacctataca gggcacttac 30

<210> 114  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 114  
acgttggatg ctcactactc acacactgac 30

<210> 115  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 115  
acgttggatg tggaatgtca cccatgtgag 30

<210> 116  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 116  
acgttggatg acctgattt gagtcagtgc 30

<210> 117  
<211> 30  
<212> DNA  
<213> Artificial Sequence

```
<220>
<223> Primer

<400> 117
acgttggatg gaggaacagt caatgaaggc 30

<210> 118
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 118
acgttggatg agcatgtgtc aactaagagg 30

<210> 119
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 119
acgttggatg ttggcccttg cgtcatttg 30

<210> 120
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 120
acgttggatg ccaaccacca ttcagaagag 30

<210> 121
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 121
acgttggatg cctacttctc tccctatatg 30

<210> 122
<211> 30
<212> DNA
<213> Artificial Sequence
```

```

<220>
<223> Primer

<400> 122
acgttggatg aatgttggga ctcctcgcag 30

<210> 123
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 123
aggcacatca tattgaat 18

<210> 124
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 124
aaaccaagga gttttccc 18

<210> 125
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 125
gagctaactt ggcctcc 17

<210> 126
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 126
tatcctaatt tccttgagca c 21

<210> 127
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

```

```

<400> 127
ccattcaatt tgtaaaattt cg 22

<210> 128
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 128
ggagttaaagc gaaaagc 17

<210> 129
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 129
ccagaaaaag agaagga 17

<210> 130
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 130
ccctccagac acctccac 18

<210> 131
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 131
aactaagaag caataaggag aa 22

<210> 132
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

```

<400> 132	
caaaaattcta tagactcgca c	21
<210> 133	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 133	
ccccctttgc cttccacc	18
<210> 134	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 134	
ttcccccaag aatatcaaccc	20
<210> 135	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 135	
cgaggacaga gactgta	17
<210> 136	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 136	
agacacactg cccccccc	17
<210> 137	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 137	
ctggagattt tccatgttag	20

```

<210> 138
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 138
gaaggccatg tgagtatt 18

<210> 139
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 139
gaccaagaat agccaaag 18

<210> 140
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 140
cttgccactc tccttgc 17

<210> 141
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 141
ctgtggcgta cacatgaaac tg 22

<210> 142
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 142
gcctcctgtc tttccagag 19

```

```

<210> 143
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 143
acaagtccta ccctcag 17

<210> 144
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 144
tttggctgaa agtatgcttc tata 24

<210> 145
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 145
cgcctggaa accatgctt 19

<210> 146
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 146
gtgtgagcca ctgtgcc 17

<210> 147
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 147
accccccggggaa atgttta 17

<210> 148
<211> 22

```

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 148
agttgagttc cttataaaga aa 22

<210> 149
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 149
acttattggc ctcttaaaac 20

<210> 150
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 150
cctcagtcaa ttaaaactca tca 23

<210> 151
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 151
tcagagtgtt tctgattaa a 21

<210> 152
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 152
gaaaaccttag gcaatacc 19

<210> 153
<211> 19
<212> DNA
<213> Artificial Sequence

```

```
<220>
<223> Primer

<400> 153
cagttcaactc gttgattta 19

<210> 154
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 154
aggagaaaaca ggaaagtaca g 21

<210> 155
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 155
agaggatgaa taggccc 17

<210> 156
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 156
aagcttctag aatactatct gt 22

<210> 157
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 157
ttttctaaat ctacatgctt tgtt 24

<210> 158
<211> 17
<212> DNA
<213> Artificial Sequence
```

<220>		
<223> Primer		
<400> 158		
ccacaccacc atctaag		17
<210> 159		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 159		
ggtggaaat taggtatgtg		20
<210> 160		
<211> 18		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 160		
catcaagac ttcagag		18
<210> 161		
<211> 17		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 161		
ttggcctgtc tactgat		17
<210> 162		
<211> 18		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 162		
tctctgctgt gttatcca		18
<210> 163		
<211> 18		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		

```

<400> 163
cataccagtt tgcactgc          18

<210> 164
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 164
aagcctggtt tttttcttt tg          22

<210> 165
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 165
aaggggaaatt ggttccag          18

<210> 166
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 166
tttatgtccc gagttaaaat at          22

<210> 167
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 167
tttcatgtgc ttattggcc          19

<210> 168
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

```

<400> 168	
tcctcataaa ccatctttt	20
<210> 169	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 169	
atgggattac agaaaattga c	21
<210> 170	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 170	
tgtcctaacc actacac	17
<210> 171	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 171	
tagaattcaa aacaagtggt aa	22
<210> 172	
<211> 23	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 172	
caaaatgata acacatcaat gta	23
<210> 173	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 173	
tccaaatgat ctcaacacacct	20

```

<210> 174
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 174
tctctgctga agttgct 17

<210> 175
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 175
gatccaaattc tggccaaattt aat 23

<210> 176
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 176
gcggcaggac tggAACG 17

<210> 177
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 177
aggaaaaaga agacaaattt agac 24

<210> 178
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 178
aaaaaaaaaa cacaaaacac tg 22

```

```
<210> 179
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 179
caaatttttg ttgaatgcc 19

<210> 180
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 180
ctctccctat atgcaatca 19

<210> 181
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 181
cttgggggtgc tgttttct 18

<210> 182
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 182
attgccacag ggagtgat 18

<210> 183
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 183
ctctccctcc agaaaaaaata 20

<210> 184
<211> 21
```

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 184
ctcagcagca ttaagtacag t 21

<210> 185
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 185
gagttacagc gaagcataa 19

<210> 186
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 186
tccttgtggg gaagtataag 19

<210> 187
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 187
tggagcactc taaagcaata c 21

<210> 188
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 188
atccccttcc ccctttac 18

<210> 189
<211> 20
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Primer

<400> 189
aagacaggag gcttcatact 20

<210> 190
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 190
cctttggaag atagaaatca gt 22

<210> 191
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 191
aaagaaaaatg tgccatacag 20

<210> 192
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 192
tgcgtcattt tgcttattt 19

<210> 193
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 193
aaaaaaagcaa gaagcctagt 20

<210> 194
<211> 18
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Primer

<400> 194
tttctcctcc ccattttgt 18

<210> 195
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 195
tacaatcatc cccagaatc 19

<210> 196
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 196
ctggaggaga aacagataaa 20

<210> 197
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 197
ccgaaatgtc ctattgaac 19

<210> 198
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 198
tgccccagtg ttgttaact 18

<210> 199
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

```

<400> 199	
actcctcgca gaaatcaa	18
<210> 200	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 200	
cttggattgt actggaatgt g	21
<210> 201	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 201	
acaagcgtat ctgtttcagt	20
<210> 202	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 202	
tacctactta tctccctctg at	22
<210> 203	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 203	
tgaagggttc ctcgatt	18
<210> 204	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	

<400> 204		
at <del>t</del> ccagtc actctgtctt		20
<210> 205		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 205		
ctgatgctta tttgccat <del>t</del>		20
<210> 206		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 206		
ttccc <del>t</del> tctt aggttttctt		20
<210> 207		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 207		
ctttctatcg ct <del>t</del> tgaaatac a		21
<210> 208		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 208		
acacagaacc ct <del>t</del> tgagaa		19
<210> 209		
<211> 30		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Primer		
<400> 209		
acgttggat <del>g</del> acctctt <del>c</del> c tttcatcatc		30

<210> 210  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 210  
acgttggatg accagagtta gaacttctgc 30

<210> 211  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 211  
acgttggatg tacttacagg catcacaggc 30

<210> 212  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 212  
acgttggatg agatgagtca gctatgcctc 30

<210> 213  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 213  
acgttggatg agatgagtca gctatgcctc 30

<210> 214  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 214  
acgttggatg tacttacagg catcacaggc 30

```

<210> 215
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 215
acgttggatg atcaccactt caatgttggg 30

<210> 216
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 216
acgttggatg cctacttctc tccctatatg 30

<210> 217
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 217
acgttggatg tgttctcagt aaaagagggc 30

<210> 218
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 218
acgttggatg acacatgggc tttggtagc 30

<210> 219
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 219
acgttggatg gaagtcttac ttcaaatgtt 30

<210> 220
<211> 31

```

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 220
acgttggatg gagtcatttt aaaaaattca g 31

<210> 221
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 221
acgttggatg attggagtgc aaggaaaatc 30

<210> 222
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 222
acgttggatg catatcaagt ctatctagag g 31

<210> 223
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 223
cttctgccag aaaaagagaaa gga 23

<210> 224
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 224
ctcaggaggtaaaggaaaa g 21

<210> 225
<211> 23
<212> DNA
<213> Artificial Sequence

```

<220>  
<223> Primer  
  
<400> 225  
acaggctctg ggtcaatttg tcc 23  
  
<210> 226  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 226  
tctctcccta tatgcaatca 20  
  
<210> 227  
<211> 21  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 227  
gctttggta gcttcttatac c 21  
  
<210> 228  
<211> 19  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 228  
attcagatgc taaaagaatt 19  
  
<210> 229  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Primer  
  
<400> 229  
tagaggtgat aaggacttca 20  
  
<210> 230  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 230  
caatgccaac catgactgat 20

<210> 231  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Primer

<400> 231  
cgggtgttgg a cagcgtgtaa a 21

<210> 232  
<211> 21  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide

<400> 232  
aagcccaugu guucgagugu a 21

<210> 233  
<211> 21  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide

<400> 233  
aagaguugga uagcaagaca a 21

<210> 234  
<211> 21  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide

<400> 234  
aagacagaua cgaugaugag a 21

<210> 235  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Illustrative polynucleotide sequence  
  
<220>  
<221> modified\_base  
<222> (3)..(21)  
<223> a, t, c or g  
  
<400> 235  
aannnnnnnn nnnnnnnnnn ntt